



## Sodium Chlorate Plant – December 9, 2025 PUB Presentation



# Who We Are

- Chemtrade Logistics is a Canadian-based chemical manufacturing and handling company that has been serving customers throughout North America for over 50 years.
- We have Sulphur, Water Chemical and Electrochemical Business Divisions
- 60 plus locations across North America and 1 in Brazil



# Our Brandon Facility

- Sodium Chlorate is produced through an electrolytic reaction. Its primary use is in the pulp and paper market as a bleaching agent.
- Largest Sodium Chlorate site in North America. Chemtrade's only Sodium chlorate facility.
- Original start up date was 1968, with current electrolytic technology start up in 1986.
- Phased electrolytic cell line expansions, 1 to 7, occurred from 1986-2008.
- Largest single power consumer in Manitoba (223 MVA) at maximum load- equivalent to over 117,000 homes
- At the time of these expansions, the chlorate market was stronger and Manitoba power pricing drove these projects. Our Phase 6 plant was relocated from Taft, Louisiana to Brandon due to power cost in 2003

# Our Brandon Facility

Our Substation.  
Direct line from  
Brandon GS  
installed in 2014  
(223 MVA)

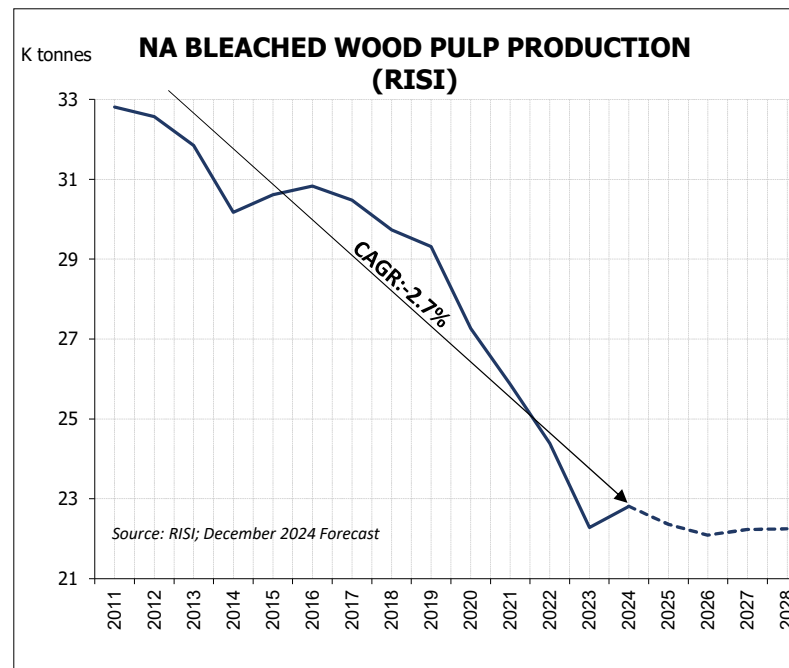
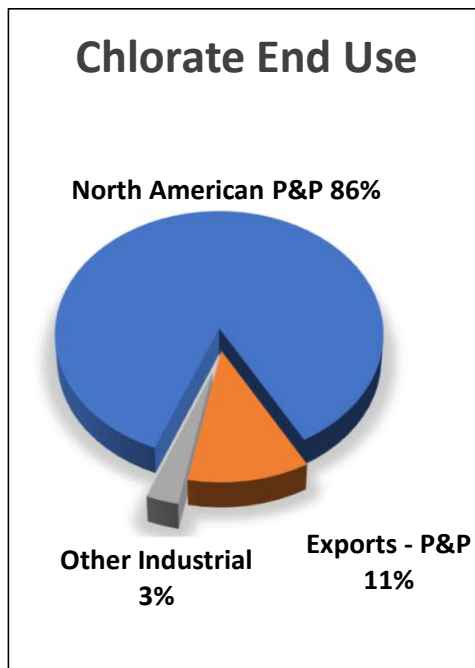




# Our Brandon Facility

- Strong safety culture and long history of Responsible Care (1994)
- We are ISO 14001, 9001, Made Safe Certified and utilize Lean Six Sigma training and tools to help facility continuous improvement.
- 78 permanent staff and utilize 100 + contractors during our busiest outage of the year
- Highly skilled, high paying jobs for our area, and is considered one of the premier employers in the region, along with other MIPUG member facilities.
- Currently, the Brandon plant is still not running at full capacity despite closing 3 other Chemtrade chlorate plants due to market conditions. The most recent occurring last year with our Prince George facility.

# Our Business Market (Driven by Pulp and Paper)



- **11 - Bleached Pulp Mill Closures** \* since 2023
- **Pulp and Paper market decline is primarily in Printing and Writing (1/3 of the market)**

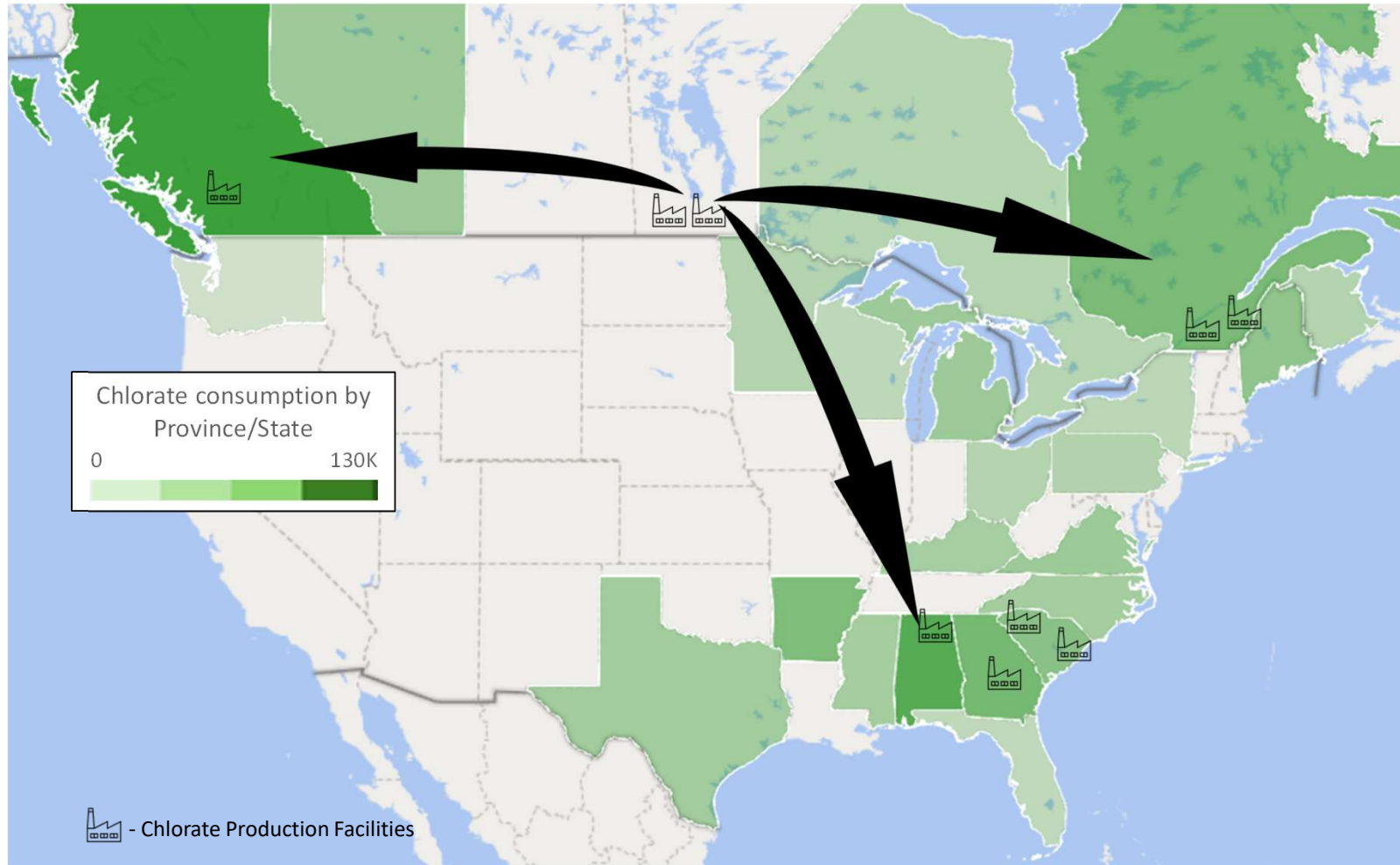
# Our Business Competitiveness

- Excess chlorate production available, providing a highly competitive market
- We expect this to continue until chlorate production is closer to matching the pulp and paper demand
- Outside of variable costs we have a total spend of over \$38 M on capital and period costs for 2025
- Electricity accounts for approximately 70% of variable costs
- Transportation to pulp mills is the biggest disadvantage the site has compared to competitors (NA export market requires bagging.)
- Tariffs and percentage of business US vs Canada. (35% sold in Canadian Market and the other 65% to US.)

# Transportation

- Sodium chlorate (chlorate) and our input raw material salt are shipped by rail.
  - At maximum, approximately 3200 chlorate and 1600 salt cars travel per year by CN and CP.
- Our central location presents both advantages and disadvantages. While it provides logistical balance, it also places us furthest from the pulp markets we serve, which impacts transportation costs and competitiveness.
- **Annual transportation increases of 5% per year the last 5 years.**
- The closed plants in Nanaimo, B.C., Beauharnois, Québec, and Prince George, British Columbia, were strategically located near or directly connected to local pulp market producers, which had previously provided them with a competitive advantage in supply and distribution.

# Chlorate Consumption Map



# Importance of Power Supply

- Our annual power consumption from Manitoba Hydro is expected to be over \$70 M in 2025
- **3.5% increase over 3 years** will add more than \$7 M (Based on 2025 expectations) to our costs
- This has a significant impact on decision-making related to future growth and the long-term stability of the Brandon site
- Chemtrade has already made the decision to shut down three other sodium chlorate facilities in 2017, 2022 and 2024, underscoring the importance of evaluating ongoing viability.

# Importance of Power Supply

- Manitoba power pricing has previously supported investment and growth
- Key driver for projects such as waste green hydrogen utilization that is being looked at in Brandon (currently not utilizing 7247 MT/YR), less production demand will reduce Hydrogen available.
- For comparison, Air Liquide's Plant in Quebec is the largest hydrogen proton exchange membrane electrolyzer in Canada. At 20 MW it produces 8.2 tonnes per day or approx. 2993 T/YR.

# What Helps Us

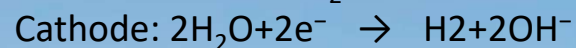
- Predictable power supply and rates that are based on true cost of service
- Looking for cost-based rates that are fair and equitable
- GSL >100kV is currently at Revenue Cost Coverage (RCC) of 110%
- Support shift towards zone of reasonableness in short-term (95% -105%).
- Goal should be 100% in the long term to ensure that rates are cost-based, fair and equitable, stable and predictable.
- Flexibility for alternative rate options; Time of Use and Curtailment Programs
- Better incentives for energy efficiency projects and support

# Time of Use

- Support time of use but the available cost savings are curtailed by the 90% off-peak ratchet
- Missing dropping load could cost us 20 MVA x \$7720 for the month if we are late by 15 minutes (poses \$150 K risk, which can erode any savings)
- Savings are clawed back through the additional 2.9 % increase in the demand rate which occurred in April 2024.
- This resulted in significant increase in costs outside of the general rate increases
- More flexibility in this program would be welcomed

# Comments or Questions?

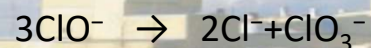
*Electrolysis of brine (NaCl solution):*



*Formation of sodium hypochlorite (NaClO):*



*Conversion to sodium chlorate (NaClO<sub>3</sub>):*



*Sodium chlorate crystallizes from solution:*

