

Environmentally Sustainable Management of Invasive Dreissenid Mussels using Zequanox[®] Molluscicide



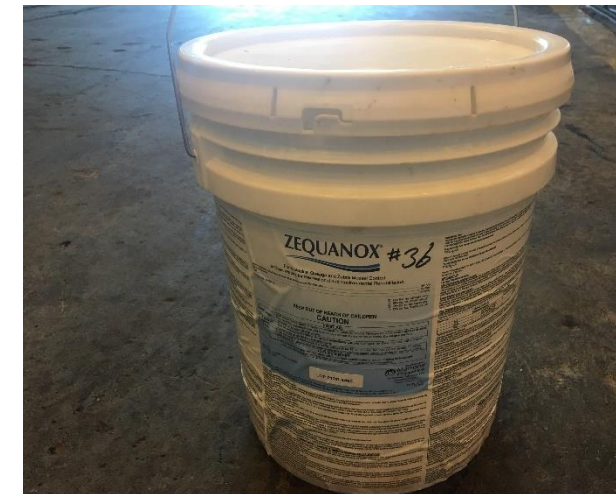
Forward Looking Statement



This presentation may include forward-looking statements. These statements reflect the current views of the Company's senior management with respect to future events and financial performance. These statements include forward-looking statements with respect to the Company's business and industry in general, including statements regarding potential market size of Company products, anticipated product launches, target geographic markets, factors for the barriers to entry into the market, and strategies for growth. Statements that include the words "expect," "intend," "plan," "believe," "project," "forecast," "estimate," "may," "should," "anticipate" and similar statements of a future or forward-looking nature identify forward-looking statements for purposes of the federal securities laws or otherwise. Forward-looking statements address matters that involve risks and uncertainties such as the timing of and costs associated with the launch of products, the difficulty in predicting the timing or outcome of product research and development efforts and regulatory approvals. Accordingly, there are or will be important factors that could cause the Company's actual results to differ materially from those indicated in these statements. The statements made herein speak only as of the date of this presentation.



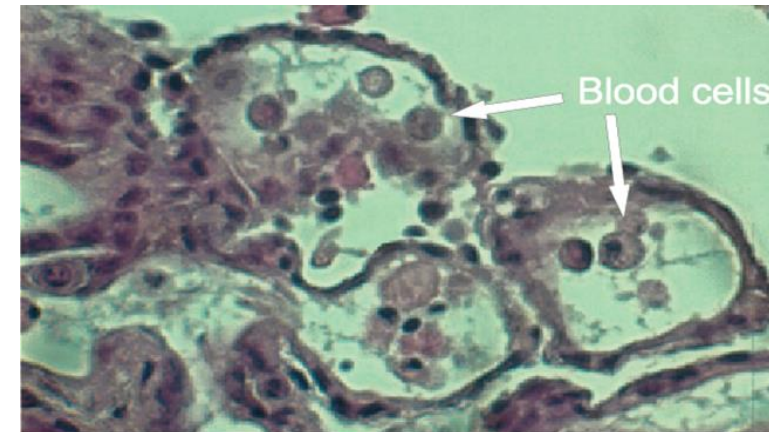
- 1. Zequanox Molluscicide Overview**
- 2. Biweekly Treatments at an Illinois Power Generating Station**
- 3. Zequanox Growth in Domestic and Global Markets**



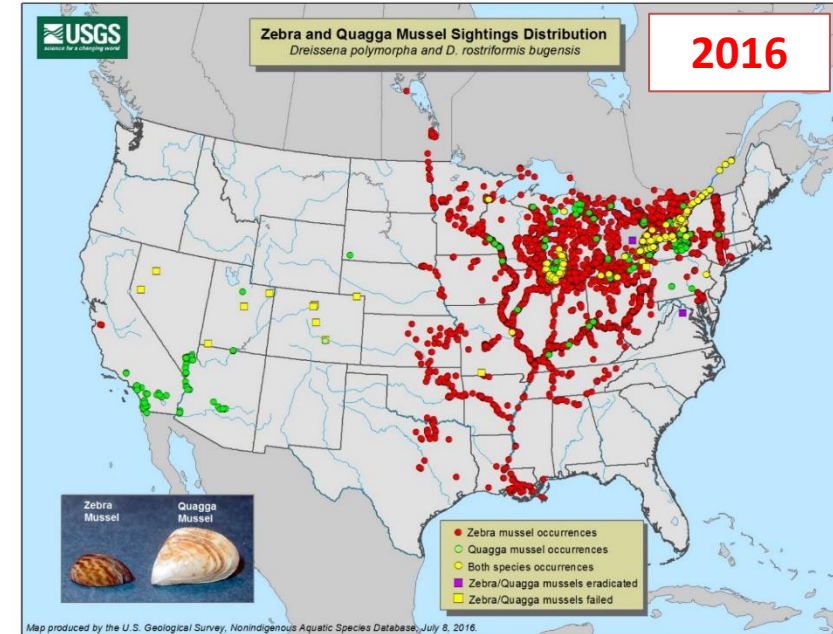
What is Zequanox molluscicide?



- **Formulated Product**
 - Active Ingredient is naturally occurring *Pseudomonas fluorescens* dead cells
 - Composition: 50% *Pseudomonas*, 50% inert ingredients
 - Wettable powder
- **Fed on naturally by zebra and quagga mussels**
 - Mussels do not close shells in presence of Zequanox molluscicide
 - Mortalities occur over a period of just a few days to a few weeks
- **Key Points**
 - Minimal PPE required for application
 - EPA approved with a tolerance exemption
 - Non-corrosive
 - Relatively short application times
 - Minimal impact on non-target organisms when applied at label rates



Need for Invasive Mussel Control



Illinois Power Generating Station Biweekly Service

Water System Invasive Mussel Control Plan



- 790 MW Coal Generating Station in Greater Chicago area
- Invasive mussel control required in Service Water System, Units 7 and 8
- Biweekly Treatment Plan
 - Late June to early October
 - Total of 8 low dose, 2 hour treatments
 - Prevention of juvenile mussel settlement
 - Gradual reduction of existing adult mussels



Illinois Power Generating Station Biweekly Service

Water System Invasive Mussel Control Plan



- **Efficacy Monitoring**

- Bioboxes placed at unit 7 and unit 8
- Adult mortalities
 - Containment tubes
 - Bags
- Settlement reduction
- Direct observation



- **Low concentration treatments**

- 10 ppm target concentration
- Concentration measured using correlation with turbidity
- Turbidity monitoring points at bioboxes and other locations in system

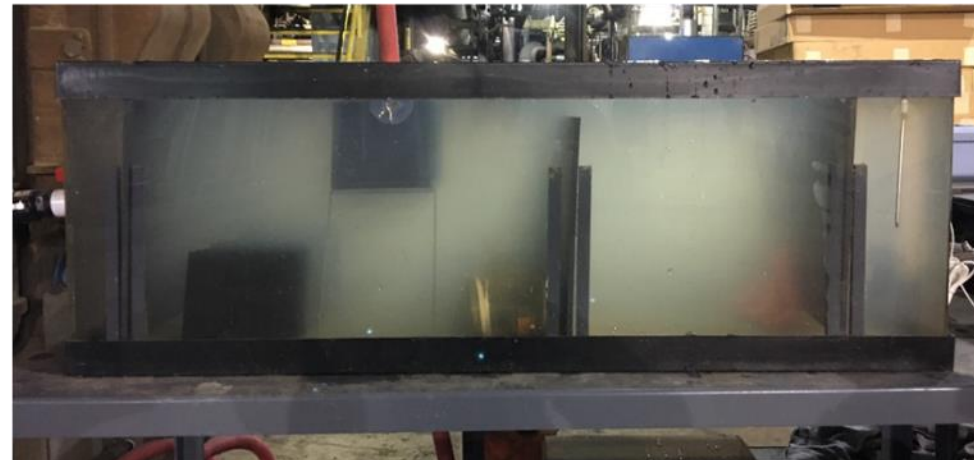


Illinois Power Generating Station Biweekly Service

Water System Invasive Mussel Control Plan



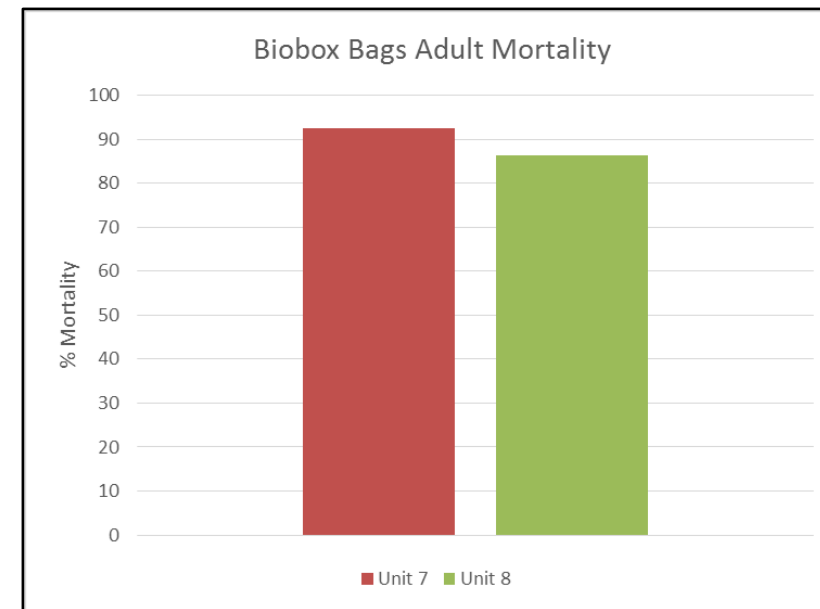
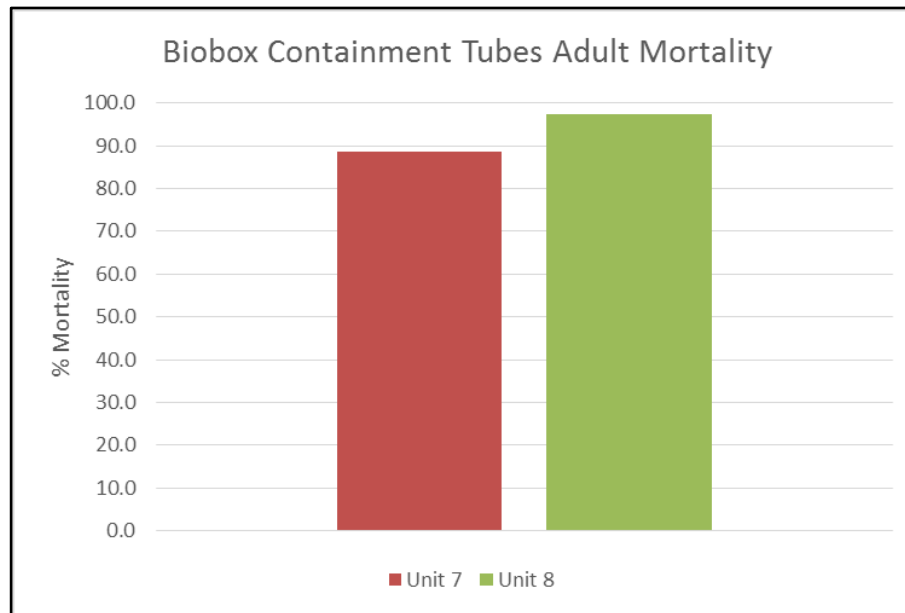
- **Unit 7 biobox**
 - Located 'early' in the system
 - Average treatment concentration higher than target
 - Higher peak concentration
- **Unit 8 biobox**
 - Located 'late' in the system
 - Average treatment concentration lower than target
 - Lower peak concentration



Illinois Power Generating Station Biweekly Service Water System Invasive Mussel Control Plan



- Unit 7: 89% adult mortality in containment tubes, 95% in bags
- Unit 8: 97% adult mortality in containment tubes, 88% in bags
- Unit 7: Settlement reduction of 95%
- Unit 8: Settlement reduction of 45%

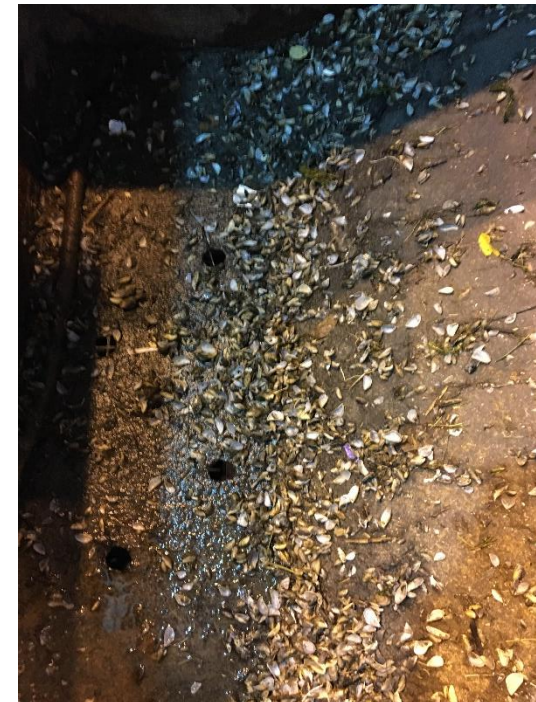


Illinois Power Generating Station Biweekly Service

Water System Invasive Mussel Control Plan



- Low concentration treatments achieved nearly full adult mortalities (92%) over the course of the treatment season
- Settlement reduced by 95% in unit 7 biobox with average concentration above target
- Settlement reduced by 45% in unit 8 biobox with average concentration below target





- **Solenis: new distributor for enclosed systems in the United States and Canada**
 - A leading provider of water, process, and functional chemistry solutions to the Pulp & Paper, Municipal, Biorefining, Energy, Chemical, and Industrial markets
 - Top global producer in specialty papermaking chemicals
 - Formed from legacy water and process companies with over 100 year legacies
 - 118 countries, 37 manufacturing facilities, 3700 professionals globally
- **Utilization of technology and experience for Zequanox molluscicide applications in the hydrocarbon processing, oil and gas, chemical processing, power, metals, pulp and paper, mining, and biorefining industries**
- **Mixing and application innovations for streamlined, efficient in-pipe treatments**



Continued Growth in Open Water Systems



- **Cooperative Partnership with the USGS**
 - Ongoing Cooperative Research and Development Agreement
 - Collaboration on Zequanox molluscicide studies for uses in open water environments
- **Round Lake Treatment July 2017**
 - Cooperation with USGS, the Tip of the Mitt Watershed Council, and universities
 - First Zequanox molluscicide open water treatment without the use of containment/barriers
 - Funded by the Great Lakes Restoration Initiative for protection of freshwater mussel habitat and to promote sustainable control of invasive mussels
- **Goal for product development to optimize for open water environments**





- **Current PMRA registration for hydropower only**
- **Submission package prepared for additional registration**
 - Expanded use for enclosed systems
 - Open water systems
- **Hydropower Station in Canada committed to 2018 biweekly treatment plan**



Health
Canada





- **Annex I dossier prepared:**
Currently at completeness check stage with UK
- **Distributor Partnership with Technoymar Soluciones**
 - Specializes in the management of projects and solutions in the hydrology sector
 - Focuses on control of invasive alien species, particularly in *Dreissena polymorpha*
- **Biobox demonstrations scheduled for 2018**
 - Hydroelectric facility
 - Two community agricultural irrigation networks





- Continuing to work with research partners and distributors to optimize product for control of invasive mussels in closed and open water systems
- Looking towards expansion into new domestic and global markets
- Focusing on biweekly, low dosage treatments for gradual control of adult mussels and prevention of juvenile settlement





Thank you!

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