

Cryotech Deicing Technology

# Sustainability Report

2021

#### **About Cryotech Deicing Technology**

Cryotech Deicing Technology is a division of General Atomics International Services Corporation, a San Diego based company specializing in energy-related research and product development. Cryotech's core business focus is de/anti-icing. Continued growth and expansion over the years has resulted in operation within six market segments, with multiple product offerings in each.

In 1992, General Atomics purchased the deicing business of Chevron Chemical Company. Included in the acquisition was the production facility at Fort Madison, Iowa, plus all patents, processes and rights developed by Chevron. The business was renamed Cryotech Deicing Technology, the root word "Cryo" meaning cold.

Cryotech's Fort Madison, Iowa plant received ISO 9000 certification for its quality process systems in 1998. ISO is an internationally recognized quality model. It provides assurance to customers that the products they receive are produced and shipped under rigorous international quality standards. In July 2005, Cryotech received ISO 14000 certification. Cryotech is the first manufacturer in its industry to receive certification to two ISO standards.

In 2010, Cryotech started manufacturing Type I and Type IV propylene glycol-based aircraft deicers/antiicers. With industry-leading performance and internationally recognized product quality, the aircraft deicers Polar Plus and Polar Guard product lines continue to adapt to customer needs.

Cryotech's business development efforts focus on opportunities to take its service, product expertise and expansive updated facility beyond its core deicing business. Cryotech is known for consistently providing quality products with exceptional performance while limiting environmental impact. With customer needs as priority one, Cryotech expanded into agriculture product lines in 2021.

#### **About General Atomics**

General Atomics was conceived in 1955 at San Diego, California for the purpose of harnessing the power of nuclear technologies for the benefit of mankind. General Atomics' basic research into fission and fusion has matured into competence in many technologies, making GA and its affiliated companies one of the world's leading resources for high-technology systems development ranging from the nuclear fuel cycle to remotely operated surveillance aircraft, airborne sensors, and advanced electric, electronic, wireless and laser technologies.

#### **Report Scope**

Cryotech's 2021 Sustainability Report summarizes the sustainability performance of Cryotech Deicing Technology at the Fort Madison facility.



# **Business Policy**

#### **OUR VISION**

Be the world leader in deicing/anti-icing technologies and other products and services to make customers' problems go away and create stakeholder value.

#### **OUR MISSION**

Achieve outstanding customer satisfaction.

Continually improve processes and efficiencies within our business.

Work within planned budgets and schedules.

Manufacture and deliver innovative, high-quality, cost-effective products.

Protect the environment through regulatory compliance, prevention of pollution, and innovation.

Provide our employees a safe, productive, and rewarding work environment.

#### **OUR CORE VALUES**

Act with INTEGRITY

Provide Excellent CUSTOMER SERVICE

Embrace COLLABORATION

Aspire to INNOVATE

Assume ACCOUNTABILITY

Strive for CONTINUAL IMPROVEMENT

Treat Everyone with RESPECT

Promote ENVIRONMENTAL STEWARDSHIP

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## From Amy Munday & Bill Nason

We are pleased to issue our third bi-annual Sustainability Report. Cryotech continues its sustainability journey achieving further improvements in key metrics that mark our progress in reducing our impact on the environment and our use of fossil fuels. These improvements have come while the demand for our products has increased. Reducing our carbon footprint while increasing our production is challenging, to say the least, but the Cryotech team is up to this challenge.

We've continued our record of excellent environmental stewardship and have achieved marked improvements in our employee health and safety metrics.

These improvements have all been accomplished while still dealing with the effects of a global pandemic. The Cryotech team continues to demonstrate that it is resilient, flexible, dedicated, and infused with a spirit of continuous improvement.

We look forward to the challenges ahead, as we strive to be a valued partner to our customers, our team members, and our community.

VP, Sales and Marketing

VP, Operations

## Corporate Governance and Accountability

Cryotech Deicing Technology is subject to and complies with General Atomics' Code of Business Ethics and Standards of Conduct (Company Policy CP-003).

It is the policy of the Company to comply with all laws governing its domestic and foreign operations and to conduct its affairs in keeping with the highest moral, legal, and ethical standards. This Code of Business Ethics and Standards of Conduct is endorsed by the Company's shareholder, its Board of Directors, and management and applies to all employees of the Company.

The policy specifically identifies requirements for its commitment to product quality and safety, fair business competition, maintenance of accurate business records, fair employment practices, legal and fair interactions with customers and suppliers, protection of the environment and employee safety and health, and maintenance of a position of trust. The policy also identifies procedures for reporting ethical violations both internally and externally and specifies that employees who report such irregularities are protected from adverse action or retribution.

The policy is available to employees on the company's internal web site.

## Responsible Development

Cryotech's Responsible Development Team operates under the direction of Cryotech management and is responsible to develop and implement initiatives to improve the performance of Cryotech in the areas of environmental stewardship, sustainability, social governance, and corporate citizenship.

## Employee Health & Safety

Cryotech Deicing Technology has integrated protection of employee safety and health into its mission, as stated in the Company Business Policy. In addition, the company is subject to and complies with General Atomics' policy on Environmental Health & Safety (Company Policy CP-700).

The policy commits to protect the environment and promote the health and safety of employees, visitors, and communities in which the Company operates and to conduct its operations in full compliance with applicable environmental, health, and safety laws and regulations.

Cryotech's CEO is responsible for ensuring that all operations within Cryotech are conducted within applicable EH&S laws and regulations. Each Cryotech employee is responsible for EH&S programs and procedures and for attending EH&S training as necessary or appropriate with respect to such employee's job title and duties.

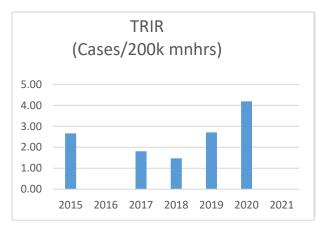
## Safety Scorecard

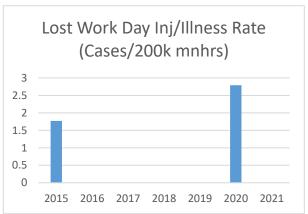
- OSHA Recordable Injury Rate (TRIR)<sup>1</sup>: 0.00
- DART Injury Rate<sup>2</sup>: 0.00

<sup>&</sup>lt;sup>1</sup> Injuries recorded per U.S Occupational Safety & Health Administration rules. Recordable injury rate (TRIR) = Number of Recordable Injuries x 200, 000/Total Hours Worked.

<sup>&</sup>lt;sup>2</sup> DART Injury Rate = Number of Injury/Illness Cases Requiring Days Away from Work or Restricted Work Days x 200,000/Total Hours Worked.

- Lost Work Day Injury/Illness Rate<sup>3</sup>: 0.00
- Safety Training: 1740 Training Modules Assigned/1740 Training Modules Completed, 100%
   Completion





## Objectives and Initiatives

- Achieve OSHA Recordable Injury Rate below industry average of 1.7.
- Maintain EH&S-required training at 100% completion.
- Develop and establish EHS leading indicator metrics.

## Employee Engagement & Retention

Cryotech is supported by General Atomics' Human Resources Dept. for employee engagement and retention. Employees are offered opportunities for health, wellness, and professional development through GA programs.

- GA Learning & Organizational Development: General Atomics' Learning & Organizational
  Development team is committed to partner across the enterprise to provide high quality
  learning and organizational development services by offering:
  - Leadership development
  - Professional skills development
  - Enterprise learning support services
  - Talent management, assessments, and coaching
- Mission Excellence: Cryotech's and General Atomics' employee recognition program. The
  company encourages supervisors and peers to formally recognize performance of team
  members who go above and beyond on a project or who consistently demonstrate the
  company's values through its Mission Excellence program. The program features a social
  sharing wall and monetary awards for excellence.

<sup>&</sup>lt;sup>3</sup> Lost Work Day Injury/Illness Rate= Number of Injury/Illness Cases Requiring Days Away from Work x 200,000/Total Hours Worked

## **Environmental Performance**

Environmental stewardship is a core value at Cryotech Deicing Technology. Cryotech's Environmental Management System has been certified to ISO 14001-2015 standards. The standards require regulatory compliance as well as continuous improvement with respect to the company's environmental aspects.

## Significant Environmental Aspects

Cryotech has identified the following significant environmental aspects:

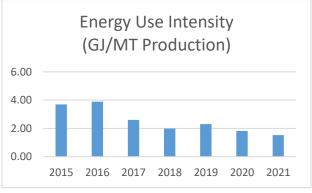
- Solid waste disposal (non-hazardous)
- Air emissions
- Water use
- Energy use
- Chemical spills (potential)

Cryotech has initiated monitoring and measurement systems to quantify these aspects and has established baselines to which the results of future improvement and reduction efforts may be compared.

#### **Environmental Scorecard**

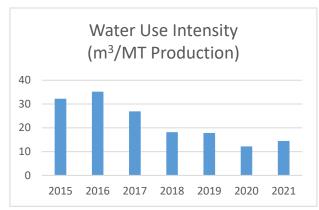
- Municipal Solid Waste: 3 kg/Metric Ton of Production
- Energy Use Intensity: 1.52 GJ/Metric Ton of Production
- Water Use Intensity: 14.5 m<sup>3</sup>/Metric Ton of Production
- CO<sub>2</sub> e (scope 1): 0.063 Metric Ton/Metric Ton of Production
- Reportable Spills: 0
- NOV's: 0

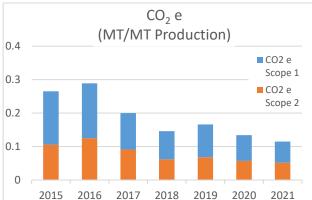




#### Since 2016:

- Cryotech's water savings could fill over 1045 Olympic swimming pools
- Cryotech's electricity savings could power over 2200 homes for a year
- Cryotech's natural gas savings could heat over 4200 homes for a year
- Cryotech's waste reduction efforts have diverted over 1000 dump truck loads out of the local landfill
- Cryptech's paper reduction efforts save 6 trees a year
- Cryotech has recycled enough steel to make over 527 pickup trucks
- Cryotech has reduced its CO<sub>2</sub>
  emissions rate equivalent to taking
  over 4700 cars off the road





### Objectives and Initiatives

- Reduce municipal solid waste (to landfill) by 20% from 2021 levels by 2024.
- Increase solid waste directed to recycling by 20% from 2021 levels by 2024.
- Implement capital projects reduce the use of natural gas, electricity, water, and reduce the volume of landfilled municipal solid waste.
- Evaluate alternate raw materials from sustainable sources.

## Community Relations

Cryotech strives to be a good neighbor and a good corporate citizen. Corporate sponsorship opportunities that align with the Cryotech Business policy are carefully chosen at the local and national level. Cryotech is proud to have sponsored coats for the homeless through the Empowerment Plan, supported veterans through Snowball Express and adopted a Polar Bear through the World Wildlife Fund. Cryotech and its employees actively continue to support the local charities and activities listed below:

- United Way corporate campaign participant
- Christmas for Kids collection site
- Parade of Lights event sponsor
- Member of Fort Madison Chamber of Commerce and Lee County Economic Development
- Living Lands & Waters Adopt a River Mile by reducing pollution in and around the river
- Donated to area youth programs such as Fort Madison Area Arts Association and local school organizations
- Donated to P.A.W.S. (no-kill animal shelter)
- Donated to local Food Pantry

## Key Performance Indicators

<b>Key Performance Indicators</b>							
	2016	2017	2018	2019	2020	2021	$\Delta\%$
Employee Health & Safety							
TRIR (inj/200,000 mnhrs)	0.00	4.66	1.4	2.58	4.19	0.00	0%
DART Rt (DART case/200,000 mnhrs)	0.00	1.44	1.39	1.29	2.79	0.00	0%
DAFW Rt (DAFW case/200,000 mnhrs)	0.00	0.00	0.00	0.00	2.79	0.00	0%
EHS Training Cmpl Rt (completion %)		100%		100%		100%	0%

Environmental							
Municipal Solid Waste (kg/MT							
Production)	8	8	7	4	3	3	-62.5%
Energy Use Intensity (GJ/MT							
Production)	3.89	2.56	1.99	2.31	1.82	1.52	-60.9%
CO₂ e Intensity (MT/MT Production)	0.289	0.2	0.146	0.166	0.134	0.115	-60.2%
CO <sub>2</sub> e (Tons, scope 1 & scope 2)	9055	8403	8902	11741	6559	7760	-14.3%
Water Use Intensity (m³/MT							
Production)	35.2	26.9	18.15	17.81	12.19	14.5	-58.8%
Reportable Spills	0	0	0	0	0	0	0%
NOV's	0	0	0	0	0	0	0%