

Company CEO: \_\_\_\_\_

Company Name

Product demonstration station officials: \_\_\_\_\_

**Check here if the company has their PASSED safety inspection card**

Companies without their safety inspection PASSED card cannot participate in the product demonstration.

Bonus points for size	Points			
<b>Size bonus (up to 10 points)</b>	0	5	10	
ROV is less than 48 cm – 10 bonus points				<b>Judge initials:</b> _____  <b>CEO initials:</b> _____
ROV is within 48.1 cm and 60 cm – 5 bonus points				
ROV is greater than 60.1 cm – 0 bonus points				
				<b>Total</b>

Fuses: ROV systems are allowed one replacement fuse during the product demonstration. In the event that the ROV system blows the second fuse during the demonstration, time will stop, the demonstration run will be over, and no additional points will be earned. Companies should have adequate replacement fuses on hand, MATE will not provide replacements.

Task # 1: The Ubiquitous Problem of Plastic Pollution (up to 80 points)	Points			
<b>Judges' Notes:</b> Companies must complete the steps of task 1.1 "Seabin - Cleaning up our ocean one marina at a time" in order. The other tasks may be done in any order.				
<b>1.1 up to 40 points – Seabin - Cleaning up our ocean one marina at a time</b>				
<b>10 points</b> – disconnecting the older power connector to the Seabin	0		10	
<b>10 points</b> – removing a previously installed Seabin's mesh catch bag	0		10	
<b>10 points</b> – installing a new mesh catch bag into the Seabin	0		10	
<b>10 points</b> – reconnecting the power connector to the Seabin	0		10	
<b>1.2 up to 40 points - Remediation: Removing plastic pollution from top to bottom</b>				
o <b>up to 10 points</b> – removing floating plastic debris from the surface				
<b>5 points each, 10 points total</b> – removing pieces of debris	0	5	10	
o <b>up to 20 points</b> – removing a ghost net from midwater				
<b>10 points</b> – pulling a pin to simulate cutting the ghost net free	0		10	
<b>5 points</b> – removing the ghost net (and pin) from the water	0		5	
<b>5 points</b> – removing the ghost net (and pin) from the water	0		5	
o <b>up to 10 points</b> – removing plastic debris from the bottom				
<b>5 points each, 10 points total</b> – removing plastic debris from the bottom	0	5	10	
				<b>Total</b>
				<b>Total Task # 1 (out of 80)</b>

<b>Task # 2: The Catastrophic Impact of Climate Change on Coral Reefs</b> <b>(up to 60 points)</b>		Points			
<b>Judges' Notes:</b> Companies may complete the steps of this task in any order.					
<b>2.1</b>	<b>15 points</b> – flying a transect line over a coral reef	0		15	
<b>2.2</b>	<b>up to 20 points</b> – propagating corals onto the reef <b>5 points each, 10 points total</b> – removing coral fragments from the nursery structure <b>5 points each, 10 points total</b> – outplanting coral fragments to designated locations on the reef	0	5	10	
<b>2.3</b>	<b>5 points each, 10 points total</b> – culling an outbreak of Crown of Thorn sea stars	0	5	10	
<b>2.4</b>	<b>5 points each, 15 points total</b> – collecting samples of sponge species for pharmaceutical research	0	5	10	15
<b>Total Task # 2 (out of 60)</b>					<b>Total</b>

<b>Task # 3: Maintaining Healthy Waterways II: Delaware River and Bay</b> <b>(up to 60 points)</b>		Points			
<b>Judges' Notes:</b> Companies may complete the steps of this task in any order.					
<b>3.1</b>	<b>up to 20 points</b> – retrieving a sediment sample from inside a drain pipe to analyze for contaminants <b>10 points</b> – returning the sediment sample to the surface <b>5 points each, 10 points total</b> – determining the type of contaminant(s) present in the sediment sample	0		10	
<b>3.2</b>	<b>up to 20 points</b> – estimating the number of mussels in a mussel bed <b>10 points</b> – retrieving and counting a sample of mussels <b>5 points</b> – estimating the number of mussels in the bed <b>5 points</b> – estimating the total amount of water filtered by the mussel bed	0		10	
<b>3.3</b>	<b>up to 20 points</b> – eel restoration <b>10 points</b> – removing a trap full of eels from the designated area <b>10 points</b> – placing an empty eel trap in a designated area	0		10	
<b>Total Task # 3 (out of 60)</b>					<b>Total</b>

Penalty Points (deduct 5 points for each infraction)	No. of Infractions		
<b>Safety:</b> Product demonstration officials may deduct points for safety violations. Minor violations are a 5 point penalty. Major violations may be 10 or more points. Product demonstration officials may also disqualify a company for extreme safety violations. <b>Note: An official's decision to disqualify a company due to safety concerns is final. If there is a safety concern, please contact the lead safety inspector or competition coordinator.</b>			
<b>Tether Pulling:</b> Company members cannot pull on the tether to assist in moving or turning the vehicle. Judges should issue a warning for the first infraction and begin deducting points AFTER the first infraction.	a		
<b>Illegal communication:</b> Company members at the side of the pool may not communicate visual evidence of the ROV status such as location of vehicle, need to turn, that the vehicle is stuck, etc.	b		
<b>Debris:</b> Companies that leave debris (e.g. parts of their ROV, including weights and flotation) in the pool at the end of the product demonstration time, or leave debris that a diver must retrieve will receive penalty points. Product demonstration props are NOT considered debris. A company constructed collection basket is considered debris if it is still in the water when product demonstration time ends.	c		
<b>Diver Assistance:</b> Any diver assistance (if available) must be requested by the company and will result in a 5 point penalty. The clock does not stop during diver assistance.	d		
<b>Total Penalty Points</b>	(total a + b + c + d ) plus safety violations	<b>Total</b>	
	X 5 =		

<b>TIME BONUS (1 point for every minute and 0.01 point for every second under 15 minutes)</b>			
Duration of Product Demonstration: _____			
Minutes under 15 remaining: _____ X 1 point = _____			
Seconds remaining: _____ X 0.01 point = _____			
<b>Time bonus</b>			<b>Total</b>

<b>TOTAL PRODUCT DEMONSTRATION SCORE</b>	<b>Grand Total</b>
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Official's initials: \_\_\_\_\_

Company CEO's initials: \_\_\_\_\_