

CICP Innovation Testing: Departmental Feedback

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Purpose:

This form allows government participants in the Canadian Innovation Commercialization Program (CICP) to provide feedback on the performance of the Innovation that could assist the Contractor in the improvement and/or preparation of the Innovation for commercialization.

Notes:

The Terms and Conditions of this feedback are outlined in the Innovation Transfer and Evaluation Agreement between the Testing Department and PWSCG, CICP. The responses provided by representatives of the Testing Department do not imply future interest in or endorsement of the innovation, nor does it provide a guarantee to the Contractor of obtaining any future contracts with the Government of Canada.

Disclaimer:

In accordance with the Communications Policy of the Government of Canada, all information within this Feedback Form is a summary of how the innovation performed, given the unique test scenario made explicit in the contract, and is not an endorsement of the innovation by the Test Department, the Canadian Innovation Commercialization Program nor Public Works and Government Services Canada.

Instructions:

Answer the questions in the space provided or by selecting the most correct response from the options provided. Where appropriate, offer constructive feedback that you feel would be beneficial for the Contractors to consider as they prepare their innovations for marketplaces.

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Part 1: Identification of Federal Government Department

1.1 - Federal Government Testing Department (Agency)

Fisheries Oceans

1.2 - Branch or Operational Unit

Coast Guard

1.3 - Name and title of Feedback Provider

Ron MacKay; Senior Response Officer

1.4 - E-mail address of Feedback Provider

ron.mackay@dfo-mpo.gc.ca

1.5 - Company Name

Extreem Spill Technology

1.6 - Innovation Name

Ocean Oil Spill Skimmer

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Part 2: Level of Involvement in Testing Proccess

2.1 - Describe in detail your role or responsibility in testing this innovation. Please include the names and roles of anyone else that may have participated

Role: to provide personnel, fuel, and observations to EST of the operation of the system

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Part 3: Testing Plan

3.1 - Did the innovation meet the requirements / expectations as identified in the Test Plan

Yes

Please explain the outcome of the testing performed

The system operated as expected, however the barge required additional ballast in order for the skimming unit to reach the water surface to make the vacuum seal required to skim the oil off the water surface. Additionally, the system required a smaller fill hose to pump water into the hull to achieve the additional ballast required. The skimming apparatus retrieved simulated oil very efficiently and consistent with the measured efficiency as observed at the Ohmsett Testing.

Please provide strengths and/or weaknesses as may be applicable

The most obvious strength with the EST technology is that it is able to collect oil at a much higher throughput efficiency capacity than conventional oil spill skimming equipment. It also has less moving parts and as a result is expected to have a much reduced preventative maintenance and/or clean up costs. If there were any weaknesses for this particular project it would be that the unit would be much more effective if it were powered as originally designed rather than non powered and relied on being towed by another vessel. Having a non powered vessel reduces its capacity in the sense that the unit is not able to attack oil slicks as aggressive as it is intended not to mention the fact that it ties up additional human and equipment resources by the necessity of requiring a tow vessel. The unit also only had one drain cock in one hull. An additional drain cock in the other hull is required to remove ballast and/or oil should it be temporarily stored in these void spaces.

3.2 - Were you able to complete the plan for testing as outlined by the Contractor

Yes

If not, please elaborate on why this was the case and what modifications were made to the Test Plan

(No response)

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Part 4: Level of Satisfaction

4.1 - Do you feel that this innovation met the needs of your department as outlined in the Statement of Work for this contract

Yes

Please elaborate

Yes, but with limitations. Originally the project called for the unit to be powered, but circumstances with PWGSC required the apparatus to be constructed as a non powered unit. However it should be noted that this did not affect the capabilities or effectiveness of the Oil Skimming Unit housed on the catamaran.

4.2 - Were there any issues or challenges while testing the innovation

Yes

If yes, please elaborate on these challenges and how they were overcome

The unit required additional ballast in order for the skimming unit to be slightly submerged below the water surface to achieve and maintain a vacuum seal. A smaller hose arrangement had to be obtained in order to fill the pipe stand with ballast water. Only one hull of the catamaran was fitted with a drain cock. The power unit driving the blower assembly required a spray shield in order to protect the motor and blower bearings from corrosion from salt water spray. The blower assembly has been mounted vertically rather than horizontally to aid in avoiding salt water collecting in the bearings.

4.3 - What anticipated and unanticipated benefits did your department experience by testing this innovation

EST skimming technology performed as expected and consistent with that observed at the Ohmsett NJ Facility.

4.4 - Do you have any comments on how this innovation could be improved as a result of the testing process

outlined in 4.2

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4.5 - How satisfied was your department with the relationship and communications made with the Contractor

Very Satisfied

Please elaborate on your working relationship and communications with the Contractor

Contractor was receptive to observations and input. Contractor was quick to make any necessary changes as outlined as long as it did not hinder the operation of the skimming unit

4.6 - How satisfied were you with the delivery and installation of the innovation

Very Satisfied

Please elaborate with regard to the delivery and installation of the innovation

Contractor arranged for the transportation and logistics associated with the transport, launching and recovery of the unit.

4.7 - How satisfied were you with the training provided for this innovation

Fairly Satisfied

Please elaborate on the training provided

Training was limited as there were very few moving parts. Contractor provided an Operations Manual for the operation of the unit.

4.8 - How satisfied were you with the overall testing experience of the innovation

Fairly Satisfied

Please elaborate on the overall testing experience

Overall testing of the unit went well and as expected. The unit performed consistent with results documented at the Ohmsett NJ testing.

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Part 5: Future Opportunities for this Innovation

5.1 - Do you feel that your department may have a need for this innovation in the future

Yes

Please elaborate

This technology has the capability to aggressively attack oil spills on water with a high throughput efficiency. The technology may be applied in many ways including application as a magazine type which can utilize vessels which can be multi tasked rather than specialized vessels. The lack of moving parts greatly reduces the preventative maintenance costs and repairs.

5.2 - Do you feel that other government departments could benefit from the use of this innovation

Yes

If yes, please indicate which departments

Although designed for oil spills this technology may be useful for the removal of any floating material...however an appropriate pump or extraction device may have to be outfitted on the skimming unit.

5.3 - Do you feel there could be other potential users of this innovation outside of the Government of Canada

Yes

Please elaborate

see 5.2

Part 6: Additional Comments

6.1 - Do you have any additional comments to provide based on the innovation and/or your testing experience

(No response)