

**AGREEMENT BETWEEN THE CITY OF LOS ANGELES
AND THE CITY OF LONG BEACH**

**ESTABLISHING COSTS TO BE SHARED
UNDER THE CLEAN AIR ACTION PLAN**

NETT TECHNOLOGIES, INC.

BLUEMAX NOVA 320e HARBOR CRAFT DEMONSTRATION

THIS AGREEMENT is made and entered into by and between the CITY OF LOS ANGELES, a municipal corporation, acting by and through its Board of Harbor Commissioners, at its meeting of _____, 2018, and the CITY OF LONG BEACH, a municipal corporation, acting by and through its Board of Harbor Commissioners, at its meeting of July 9, 2018.

WHEREAS, the Cities of Los Angeles and Long Beach, acting by their respective Board of Harbor Commissioners ("Ports") have entered into Los Angeles Agreement No. 2546/Long Beach Agreement No. HD-7173 ("Master Cost Sharing Agreement") expressing their desire to share the costs of certain contracts related to the San Pedro Bay Ports Clean Air Action Plan; and

WHEREAS, the Ports are interested in sharing the cost of an agreement to have Nett Technologies, Inc. ("Nett") design, manufacture, and demonstrate an emission control system for diesel powered harbor craft (the "Project") in accordance with the terms of the Master Cost Sharing Agreement;

NOW, THEREFORE, THE PORTS AGREE AS FOLLOWS:

1. The City of Long Beach has entered into or intends to enter into an agreement with Nett for the Project.
2. The term of the agreement between the City of Long Beach and Nett shall commence upon execution and, subject to the City of Long Beach's right to terminate early, shall terminate on December 31, 2020.
3. The total cost of the project is estimated at \$1,200,000 with the Ports paying \$250,000 each and Nett contributing the remaining amount.
4. The terms and conditions of the Master Cost Sharing Agreement are incorporated by reference into this agreement and the Ports agree to abide by all the terms and conditions of said agreement.
5. The terms of this cost sharing agreement shall be amended only in writing and signed by both parties.

HD-7173Hh

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the date to the left of their signatures.

THE CITY OF LOS ANGELES, by its Board of Harbor Commissioners

Date: _____, 2018

By: _____
EUGENE D. SEROKA
Executive Director

ATTEST: _____
AMBER M. KLESGES
Board Secretary

THE CITY OF LONG BEACH, a municipal corporation, acting by and through its Board of Harbor Commissioners

Date: July 31, 2018

By: Mario Cordero
MARIO CORDERO
Executive Director

APPROVED AS TO FORM AND LEGALITY:


August 22, 2018
MICHAEL N. FEUER, City Attorney
JANNA B. SIDLEY, General Counsel

By: Heather M. McCloskey
HEATHER M. MCCLOSKEY
Deputy City Attorney

Account#	<u>59965</u>	W.O.#	<u>78085</u>
Ctr/Div#	<u>0330</u>	Job Fac.#	<u>637-00</u>
Proj/Prog#	<u>000</u>		
Budget FY:		Amount:	
<u>18/19</u>		<u>\$ 50,000</u>	
<u>19/20</u>		<u>\$ 200,000</u>	
<u>20/21</u>		<u>—</u>	
TOTAL		<u>\$ 250,000</u>	
For Acct/Budget Div. Use Only:			
Verified by:	<u>Fdu</u>		
Verified Funds Available:	<u>70000</u>		
Date Approved:	<u>8/22/18</u>		

[SIGNATURE PAGE CONTINUED]

APPROVED AS TO FORM:
CHARLES PARKIN, City Attorney

By: 
DAVID R. ALBERS
Deputy City Attorney

Date: July 26, 2018

OFFICE OF THE CITY ATTORNEY
CHARLES PARKIN, City Attorney
333 West Ocean Boulevard, 11th Floor
Long Beach, CA 90802-4664

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AGREEMENT
BETWEEN THE CITY OF LONG BEACH AND
NETT TECHNOLOGIES, INC.
6154 KESTREL ROAD
MISSISSAUGA, ON L5T 1Z2
MISSISSAUGA, ONTARIO, CANADA L4V 1P7
TELEPHONE NO. (800) 361-6388
FAX NO. (905) 672-5949

THIS AGREEMENT is made and entered into, in duplicate, as of the date executed by the Executive Director of the Long Beach Harbor Department ("Executive Director"), by and between the CITY OF LONG BEACH, a municipal corporation, acting by and through its Board of Harbor Commissioners ("City"), pursuant to authority granted by said Board at its meeting of July 9, 2018; and NETT TECHNOLOGIES, INC., a corporation registered in Ontario, Canada (O 1087991) ("NETT").

1. This agreement is made with reference to the following facts and objectives:

1.1 City and the City of Los Angeles Harbor Department ("Los Angeles") (referred to collectively as "joint ports") created the Technology Advancement Program ("TAP") as part of the joint ports' Clean Air Action Plan ("CAAP") in order to accelerate the verification or commercial availability of new, clean technologies that are applicable to the port industry and result in significant reductions of diesel particulate matter, nitrogen oxides, sulfur oxides and other pollutants.

1.2 Through the TAP, the joint ports provide grant funding to assist port-related technology vendors in identifying, evaluating and demonstrating new and emerging emissions reductions technologies and strategies that may result in new control measures, alternatives to existing strategies or as additional mitigation options under the CAAP.

1.3 The TAP Committee reviewed proposed projects for funding and hereby recommends approval of the Scope of Work attached hereto as Exhibit A

HD-8947

1 and incorporated herein by this reference ("Proposal") for NETT to design,
2 manufacture, and demonstrate an emission control system for diesel powered
3 harbor craft (the "Project").

4 1.4 The total amount which shall be payable by City and City of Los
5 Angeles to Nett for Nett's Project costs during the term of this agreement shall not
6 exceed \$500,000. City intends to seek reimbursement for fifty percent (50%) of the
7 funding for Consultant's services (\$250,000) from the City of Los Angeles pursuant
8 to a separate cost sharing agreement with the City of Los Angeles.

9 2. Nett agrees to procure, design, develop, integrate, deliver, test,
10 demonstrate, and report on the Project in accordance with the Proposal.

11 3. The term of this agreement shall commence upon execution and,
12 subject to the provisions of paragraph 7, shall terminate on December 31, 2020.

13 4. Charges to City shall be billed by Nett only following completion of
14 each Project task set forth on Exhibit A and payments work performed shall be made in
15 accordance with the Funding Disbursement Schedule, attached hereto as Exhibit B and
16 incorporated by this reference.

17 5. Nett shall submit a separate statement not later than the twentieth day
18 after each Project Task in Exhibit A has been achieved, detailing the work performed. All
19 payments to Nett shall be made by City in due course, not to exceed twenty (20) days,
20 after approval of invoice by the Director of Environmental Planning.

21 6. All test results, data and reports, in whatever form or medium,
22 compiled or prepared by Nett in performing its services or furnished to Nett by City shall be
23 the property of the Cities of Long Beach and Los Angeles which shall have the unrestricted
24 right to use or disseminate same without payment of further compensation to Nett. Copies
25 of Nett's work product may be retained by Nett for its own records.

26 7. City shall have the right to terminate this agreement at any time upon
27 ten (10) days' written notice to Nett. If this agreement is so terminated prior to the expiration
28 of the term, Nett shall be paid for those charges which have accrued but not been paid

1 through the effective date of termination. Nett agrees to accept such amount, plus all
2 amounts previously paid, as full payment and satisfaction of all obligations of City to Nett.
3 Nett shall deliver to City all test data gathered and all reports for work performed prior to
4 termination of this agreement.

5 8. Neither City nor any of its employees shall have any control over the
6 conduct of Nett, or employees of Nett, except as herein set forth, and Nett and employees
7 of Nett shall not, at any time or in any manner, represent that Nett or employees of Nett, or
8 any of them, are the officers, agents, or employees of City. It is expressly understood and
9 agreed that Nett is, and shall at all times remain, as to City a wholly independent contractor,
10 and each party's obligations to the other party are solely such as are set forth in this
11 agreement. Nett shall be free to contract for similar services to be performed for others
12 during this agreement.

13 9. Nett agrees, subject to applicable laws, rules, and regulations, not to
14 discriminate in the performance of this agreement against any employee or applicant for
15 employment on the basis of race, color, national origin, religion, sex, sexual orientation,
16 gender identity, AIDS, HIV status, age, disability, handicap, or veteran status. Nett shall
17 ensure that applicants are employed and that employees are treated during employment
18 without regard to any of these bases, including but not limited to employment, upgrading,
19 demotion, transfer, recruitment, recruitment advertising, layoff, termination, rates of pay or
20 other forms of compensation, and selection for training, including apprenticeship. Nett
21 agrees to post in conspicuous places available to employees and applicants for
22 employment notices to be provided by City setting out the provisions of this
23 nondiscrimination clause. Nett shall in all solicitations or advertisements for employees
24 state that all qualified applicants will receive consideration for employment without regard
25 to these bases. Compliance with the Americans with Disabilities Act of 1990 shall be the
26 sole responsibility of Nett, and Nett shall defend and hold the City harmless from any
27 expense or liability arising from Nett's non-compliance therewith.

28 10. Except for Payment specifically provided in the Funding Disbursement

1 Schedule set forth in Exhibit B, any access, use or other issues, expenses, liabilities
2 relating to or arising out of Nett's use of any facility operated by Pacific Tugboat Service or
3 any other entity shall be the responsibility of Nett.

4 11. Any notices to be given under this agreement shall be given in writing.
5 Such notices may be served by personal delivery, facsimile transmission or by first class
6 regular mail, postage prepaid. Any such notice, when served by mail, shall be effective
7 two (2) calendar days after the date of mailing of the same, and when served by facsimile
8 transmission or personal delivery shall be effective upon receipt. For the purposes hereof,
9 the address of City, and the proper person to receive any such notices on its behalf, is:
10 Executive Director, Long Beach Harbor Department, P.O. Box 570, Long Beach, California
11 90801; and the address of Nett as indicated above.

12 12. Nett covenants that both itself, in its corporate capacity, and its
13 principals presently have no interest and shall not acquire any interest, direct or indirect,
14 which would conflict in any manner or degree with the performance of services required to
15 be performed under this agreement.

16 13. (a) Nett shall indemnify, protect and hold harmless City, the Board
17 of Harbor Commissioners, and their officials, employees and agents ("Indemnified
18 Parties"), from and against any and all liability, claims (including product liability claims),
19 demands, damage, loss, obligations, causes of action, proceedings, awards, fines,
20 judgments, penalties, costs and expenses, including attorneys' fees, court costs, expert
21 and witness fees, and other costs and fees of litigation, arising or alleged to have arisen,
22 in whole or in part, out of or in connection with (1) Nett's breach or failure to comply with
23 any of its obligations contained in this agreement, or (2) negligent or willful acts, errors,
24 omissions or misrepresentations committed by Nett, its officers, employees, agents,
25 subcontractors, or anyone under Nett's control, in the performance of work or services
26 under this agreement (collectively "Claims" or individually "Claim").

27 (b) In addition to Nett's duty to indemnify, Nett shall have a
28 separate and wholly independent duty to defend Indemnified Parties at Nett's expense by

1 legal counsel approved by City, from and against all Claims, and shall continue this defense
2 until the Claims are resolved, whether by settlement, judgment or otherwise. No finding or
3 judgment of negligence, fault, breach, or the like on the part of Consultant shall be required
4 for the duty to defend to arise. City shall notify Nett of any Claim, shall tender the defense
5 of the Claim to Nett, and shall assist Nett, as may be reasonably requested, in the defense.

6 (c) If a court of competent jurisdiction determines that a Claim was
7 caused by the sole negligence or willful misconduct of Indemnified Parties, Nett's costs of
8 defense and indemnity shall be (1) reimbursed in full if the court determines sole
9 negligence by the Indemnified Parties, or (2) reduced by the percentage of willful
10 misconduct attributed by the court to the Indemnified Parties.

11 (d) The provisions of this paragraph shall survive the expiration or
12 termination of this agreement.

13 14. Nett shall obtain and maintain any necessary licenses and permits
14 required under Title 3 and Title 5 of the Long Beach Municipal Code. City may withhold
15 any payment to Nett until Nett comes into compliance with such licensing and permitting
16 requirements.

17 15. This agreement shall be deemed made in the State of California and
18 shall be governed by the laws of said State (except those provisions of California law
19 dealing with conflicts of law), both as to interpretation and performance.

20 16. In the event of any conflict or ambiguity between this written
21 agreement and any exhibit hereto, the provisions of this agreement shall govern.

22 17. If there is any legal proceeding between the parties to enforce or
23 interpret this agreement or to protect or establish any rights or remedies hereunder, the
24 prevailing party shall be entitled to its costs and expenses, including reasonable attorneys'
25 fees.

26 18. This agreement shall not be amended, nor any provision or breach
27 hereof waived, except in writing signed by the parties which expressly refers to this
28 agreement.

OFFICE OF THE CITY ATTORNEY
CHARLES PARKIN, City Attorney
333 West Ocean Boulevard, 11th Floor
Lana Beach, CA 90802-4664

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19. Except with the written consent of the City, whose consent may be withheld in its sole and absolute discretion, this agreement shall not be assigned. Any proposed assignment without such consent shall be void.

20. This agreement, including all exhibits, constitutes the entire understanding between the parties and supersedes all other agreements, oral or written, with respect to the subject matter herein.

July 18, 2018
June 5, 2016

NETT TECHNOLOGIES, INC., a corporation registered in Ontario, Canada

By: [Signature]
Name: JASON POPLK
Title: DIRECTOR/OFFICER
By: [Signature]
Name: DANIEL SORIK
Title: TREASURER/SECRETARY

NETT

CITY OF LONG BEACH, a municipal corporation, acting by and through its Board of Harbor Commissioners

July 19, 2018

By: [Signature]
Mario Cordero
Executive Director
Long Beach Harbor Department

CITY

The foregoing document is hereby approved as to form.

July 16, 2016

CHARLES PARKIN, City Attorney

By: [Signature]
David R. Albers, Deputy

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

Province of ONTARIO.
 State of California
 County of MISSISSAUGA

On JUNE 5, 2018 before me, RAZI AHMAD, A NOTARY PUBLIC
Date Here Insert Name and Title of the Officer
 personally appeared JANUSZ POPIK and RYSZARD POPIK
Name(s) of Signor(s)



RAZI AHMAD
 Barrister, Solicitor & Notary Public
 GR 06, 25 Watline Avenue
 Mississauga, ON L4Z 2Z1 Canada
 905-232-2782 Fax: 905 232-2783

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature: _____
Signature of Notary Public

Please Notary Seal Above

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document

Title or Type of Document: CORPORATE PROFILE REPORT
 Document Date: JUNE 4, 2018 Number of Pages: 6
 Signer(s) Other Than Named Above: NONE

Capacity(ies) Claimed by Signer(s)

Signer's Name: JANUSZ POPIK Signer's Name: RYSZARD POPIK
 Corporate Officer — Title(s): PRESIDENT Corporate Officer — Title(s): TREASURER

- Individual
- Partner — Limited General
- Attorney in Fact
- Trustee
- Guardian or Conservator
- Other: _____

RIGHT THUMBPRINT OF SIGNER

Top of thumb here



- Individual
- Partner — Limited General
- Attorney in Fact
- Trustee
- Guardian or Conservator
- Other: _____

RIGHT THUMBPRINT OF SIGNER

Top of thumb here



Signer Is Representing: NETR TECHNOLOGIES INC.

Signer Is Representing: NETR TECHNOLOGIES INC.

CNS LEGAL PROPOSE PROVIDED

EXHIBIT A
SCOPE OF WORK
NETT TECHNOLOGIES INC. BlueMAX™ NOVA 320e (SCR/SLIP+ADPF+DOC)
HARBOR CRAFT DEMONSTRATION

Nett Technologies Inc. (Nett) and demonstration partner, Pacific Tugboat Service will design, manufacture, and verify the BlueMAX™ NOVA 320e. This emission control system consists of a combined active diesel particulate filter (ADPF) with upstream diesel oxidation catalyst (DOC) in front of a selective catalytic reduction (SCR) system with ammonia slip catalyst. The total award for this project is not to exceed \$500,000.

This project consists of five (5) major components:

- Contract Engineering
- Completion of Design and System Integration of Harbor Craft
- Installation and Commission of Harbor Craft
- De-Greening Emissions Testing/In-Use Demonstration of Harbor Craft
- Final Emissions Test and Final Report

Under this agreement, Nett shall perform the following tasks and submit the deliverables identified below.

Task 1 – Contract Engineering

Contract engineering will consist of the following subtasks:

- 1.1 Preliminary Verification Application (PVA), Permit Application/Securing of Contract
- 1.2 Initial Engineering Assessment of the Vessel
- 1.3 Fit Dimensional Study through 3D Modelling and Simulations
- 1.4 Physical Prototyping

This task consists of securing the contract and then writing and submitting the PVA. This includes project management work and communicating with California Air Resources Board (CARB) regarding PVA submittal requirements. At the same time, Nett will submit an application form for Exemptions for Add-On or Modified Parts to CARB to obtain a permit to verify. The task consists of initial dimensional assessment of the vessel, computer modelling and prototyping, which is the physical prototype fit testing. This initial phase has the highest impact on overall project success primarily because of significant amount of detailed information that is being evaluated, analyzed, experimented, and approved during this phase.

Task 1 Deliverables

- Monthly progress report that details the progress towards the completion of all subtasks under Task 1, including any coordination with the CARB, Pacific Tugboat Service and the Ports. The monthly progress report shall document actual accomplishments, cost status, schedule changes, change in approach and aims, and actual or anticipated problems and delays and how they were resolved during the reporting period.
- Engineering report with details of initial assessment, design and prototype testing.

Task 2 – Completion of Design and System Integration of Harbor Craft

Completion of Design and System Integration will consist of the following subtasks:

- 2.1 Design and Development
- 2.2 Urea Infrastructure
- 2.3 Manufacturing: Materials and Equipment

This task consists of current technology integration into the marine application as well as system integration design, and its manufacturing blueprints. For the final design, two identical systems with some variations in piping and orientation for fit will be manufactured.

This second phase consumes the most amount of resources as it includes the scaled-down testing as a part of its development phase and it also includes fabrication and factory approval testing on the two units.

Task 2 Deliverables

- Monthly progress report that covers Task 2, as defined under Task 1 deliverables.
- Design and system integration report.

Task 3 – Installation and Commission of Harbor Craft

This task includes the shipment of systems to Pacific Tugboat Service at the Port of San Diego for dry dock activities, followed by system installation and commissioning. The system will be installed by Nett with the assistance of the Pacific Tugboat Service crew. The Pacific Tugboat Service will put the vessel out of service for 1-2 weeks and provide access to the craft in order to facilitate the installation process. The system will be commissioned at Pacific Tug Boats Service at the Port of San Diego, and site approval testing may be performed at either their San Diego or Long Beach location.

Task 3 Deliverables

- Monthly progress report that covers Task 3, as defined under Task 1 deliverables.
- Installation Report, including photos showing completed installation of the combined ADPF with upstream DOC in front of a SCR system with ammonia slip catalyst and commissioning. Report will include information on the procedures to deliver tugboat to Pacific Tugboat Service at the Port of Long Beach.
- Delivery of the vessel to Pacific Tugboat Service the Port of Long Beach.

Task 4 – De-Greening Emissions Testing

This task consists of the in-use demonstration phase, which includes 75+ hours of de-greening emissions testing. The emissions test results of "fresh catalysts" are typically measured with degreened units. Many catalysts exhibit a certain activity loss in the short, initial period of their operation. After this initial activity loss, the catalyst performance remains stable over a long period of time. For this reason, new catalysts should be "degreened" before emission tests. A typical period required for degreening the proposed unit is 75 hours. This task also includes the testing that will be performed in compliance with the California Code of Regulations (CCR) Title 13, Division 3, Chapter 14 L Verification Procedure (subject to approval of PVA).

Task 4 Deliverables

- Monthly progress report that covers Task 4, as defined under Task 1 deliverables.
- +75 hours de-greening completion report.

Task 5 – In-Use Demonstration of Harbor Craft/Final Emissions Test and Final Report

This task consists of the in-use demonstration phase and it includes documentation of the progress of in-use demonstration until it accumulates the 1000+ hours of aging. The determination of catalyst durability involves testing of a fresh catalyst (degreened unit), followed by the test of a catalyst that was aged over a given period of time. This aging period is typically 1000 hours for the proposed system. Based on the measured performance, emission deterioration factors can be calculated for each of the pollutants by dividing the emission result with the aged catalyst by that with the fresh catalyst. The knowledge of emission deterioration factors, which can be determined not only for catalysts but also for the entire engine after treatment system, is necessary to provide the required engineering margins when designing emission control systems.

This task also includes the final emissions testing that will be performed in compliance with the CCR Title 13, Division 3, Chapter 14 L Verification Procedure (subject to approval of PVA).

Test Procedure:

- CCR Title 13, Division 3, Chapter 14 L Verification Procedure, Warranty and In-Use Compliance
- Requirements for In-Use strategies to Control Emissions from Diesel Engines
- Subject to final CARB approval, the following test cycle is being proposed:
 - ✓ 3 Hot-starts for each or engine baseline, De-greened system (75 hours), Aged system (1000 hours)
 - ✓ ISO 8178 test procedure Part 4, Section 8.5, Test Cycles type E “marine”
 - ✓ 1 regeneration cycle for each of De-greened and Aged systems
 - ✓ Test Fuel: Compliant with Sections 2280 through 2283 of Title 13 of the California Code of Regulations

The final report summarizes the entire project and documents emissions reduction achieved, total budget and cost, and lessons learned.

Task 5 Deliverables

- Monthly progress reports on the progress of the harbor craft in-use demonstration in Pacific Tugboat Service operations, emissions testing, and CARB verification of the BlueMax Nova 320e. The monthly progress report shall document actual accomplishments, cost status, schedule changes, change in approach and aims, and actual or anticipated problems and delays and how they were resolved during the reporting period.
- Final written project report detailing results from the +1,000 hours of in-use performance demonstration in Pacific Tugboat Service operations and emissions testing. The report shall also include discussion of the project accomplishments, cost status, schedule changes, unforeseen issues encountered during the project, lessons learned, and recommended next steps.

EXHIBIT B
PAYMENT DISBURSEMENT SCHEDULE

Payments shall be disbursed according to the "Milestones" set forth below. Upon completion of each "Milestone" and delivery of the corresponding "Deliverable" set forth below, together with a letter from Recipient certifying completion of the "Milestone", Recipient may request disbursement of grant funds in the indicated "Amount". All Deliverables must include documentation to indicate or prove the successful completion of task(s). All Deliverables are subject to the Ports' review and approval before payment is made. Regardless of the expenses incurred by the Recipient, in no event shall the funds disbursed pursuant to this contract exceed the amount of the grant award, which is \$500,000.

Nett Technologies BlueMAX Nova 320e (SCR/SLIP+ADPF+DOC)

EXHIBIT B

TASKS, DELIVERABLE AND FUNDING DISBURSEMENT SCHEDULE:

Task No.	Task Description	Task Breakdown	Deliverables	Estimated Time for Completion (weeks)	Start Date	Completion Date	TAP Contribution	Nett Contribution	Total Project Cost
1	Contract Engineering		<ul style="list-style-type: none"> Monthly progress reports detailing accomplishments, cost status, schedule and progress towards Task 1 subtasks Engineering report with details of initial assessment, design and prototype testing 	22	6/30/2018	11/30/2018	\$100,000	\$140,000	\$240,000
1.1		Preliminary Verification Application (PVA), Permit Application/ Securing of Contract		12	6/30/2018	9/22/2018			
1.2		Initial Engineering Assessment of the Vessel		1	9/23/2018	9/29/2018			
1.3		Fit Dimensional Study through 3D Modelling and Simulations		3	9/29/2018	10/20/2018			
1.4		Physical Prototyping, Prototype Installation		6	10/20/2018	12/11/2018			
2	Completion of Design and System Integration of Harbor Craft		<ul style="list-style-type: none"> Monthly progress reports detailing accomplishments, cost status, schedule and progress towards Task 2 subtasks Design and systems integration report 	30	11/30/2018	6/27/2019	\$150,000	\$210,000	\$360,000
2.1		Design and Development		8	11/30/2018	1/25/2019			
2.2		Urea Infrastructure		2	2/25/2019	2/8/2019			
2.3		Manufacturing, Materials and Equipment		20	2/8/2019	6/28/2019			
3	Installation and Commissioning of Harbor Craft		<ul style="list-style-type: none"> Monthly progress reports detailing accomplishments, cost status, schedule and progress towards Task 3 subtasks Installation report and delivery of vessel to Port of Long Beach 	7.25	6/27/2019	8/15/2019	\$150,000	\$210,000	\$360,000
3.1		Delivery of equipment to Pacific Tugboat Service/Port of San Diego		1	6/27/2019	7/4/2019			
3.2		Installation and Commissioning		6	7/4/2019	8/15/2019			
3.3		Delivery of Vessel to the Pacific Tugboat Service/Port of Long Beach		0.25	8/15/2019	8/16/2019			
4	De-Greening Emissions Testing		<ul style="list-style-type: none"> Monthly progress reports detailing accomplishments, cost status, schedule and progress towards Task 4 subtasks * 4.75 hours of de-greening completion report 	7	8/15/2019	10/2/2019	\$50,000	\$70,000	\$120,000
4.1		De-greening (+75 hours)		5	8/15/2019	9/19/2019			
4.2		Emission Testing		2	9/19/2019	10/3/2019			
5	In-Use Demonstration of Harbor Craft/Final Emissions Test and Final Report		<ul style="list-style-type: none"> Monthly progress reports detailing accomplishments, cost status, schedule and progress towards Task 5 subtasks * 4,1000 hour aging final report 	12.75	8/16/2019	11/13/2019	\$50,000	\$70,000	\$120,000
5.1		In-Use Demonstration System (+1,000 hours)		4.75	8/16/2019	9/19/2019			
5.2		Emission Testing		8	9/19/2019	11/14/2019			
		TOTAL		79			\$500,000	\$700,000	\$1,200,000