

Industrial Divers Corporation

2901 SW 3rd Ave, Suite #5
Fort Lauderdale, FL 33315

(954) 523-2906 Office
(954) 525-6521 Fax

December 13, 2022

To: Michell Smith, Environmental Manager, Florida DEP
From: Rocco Galletta, Vice President, IDC

Re: Osborne Reef Tire Mitigation SW238-23: Progress Report Task 23 A

Industrial Divers Corporation (IDC) began Task Order No. SW238-23 Part A on August 2, 2022 with up to two, five diver teams using air with surface supplied dive gear and SCUBA diving equipment. From October 22, 2022 to December 12, 2022; four or five diver teams were deployed with the *Reef Ranger*, *Reef Tender*, *Scully*, and/or *Suncoaster* Dive Support Vessels (DSV). The combination of one to two DSV's working together, each with a four or five-diver team, collected a total of 7,500 tires. The *Reef Ranger*, *Reef Tender*, *Scully*, and *Suncoaster* teams pre-rigged tires from the low-density hard bottom reef edge in Priority Area 1 along the west edge of the Osborne site, as per instructions from Pat Quinn PhD. Broward County ERM. These teams used SCUBA equipped dive teams pre-rigging tires into 30 tire bundles. *Reef Tender*, *Scully*, and *Suncoaster* teams can pre-rig up to 1,500 tires to be recovered by the *Reef Ranger* when weather conditions are good enough for SCUBA diving operations but unfavorable for crane operations due to high wind or swells. IDC has also added a full-time coordinator to manage the higher volume of trailers (up to six per week) generated by the additional boats and crews, a full-time mechanic for outboard engine and crane maintenance and repair, and a shop worker dedicated to filling pressurized cylinders needed for both surface supplied and SCUBA diving. In addition, IDC purchased fifty 1 ¼" shackles and has made 200 extra tire slings which are dedicated for pre-rigging up to 1,500 tires for pick up by the *Reef Ranger* crane and 4 new cargo nets used to transport tires from the deck of the barge to the hauling container.

The 7,500 tires were recovered and emptied into 100 cubic yard trailers located at Berth 28F in Port Everglades. All diving was performed with surface supplied air diving practices using Kirby Morgan diving helmets and hard-wired communications or a two-diver team using SCUBA gear and air breathing gas. All the tires collected by the *Reef Ranger* DSV were lifted in 30 tire clusters with the on-board crane. The tire bundles were placed in cargo nets lined with filter

Industrial Divers Corporation

fabric which were deployed in the self-bailing hold of the *Reef Ranger*. The *Reef Tender*, *Scully*, and *Suncoaster* teams used an innovative pre-rigging method, the three teams used the 200 slings to pre-rig bundles of 30 tires, up to 1,500 tires for later collection by the *Reef Ranger* when the weather permits. The pre-rigged bundles have 30 tires each with a large 1 ¼” shackle connecting each bundle to the crane hook. Slings the tires together facilitates efficient picking of the load off the bottom by the *Reef Ranger* and allows for efficient unloading into the 100 cubic yard trailers using a dedicated PEV certified land crane set up and operated by IDC at Berth 28F.

Task Order #24 A was invoiced on December 12, 2022. The total number of tires collected for SW238 through December 12, 2022 was 343,230. The total number of tires collected for SW232 and SW238 combined is 437,934 tires.

Industrial Divers Corporation

2901 SW 3rd Ave, Suite #5
Fort Lauderdale, FL 33315

(954) 523-2906 Office
(954) 525-6521 Fax

August 2, 2022

To: Michell Smith, Environmental Manager, Florida DEP
From: Rocco Galletta, Vice President, IDC

Re: Osborne Reef Tire Mitigation SW238-22: Progress Report Task 22 B

Industrial Divers Corporation (IDC) began Task Order No. SW238-22 Part B on May 14, 2022 with up to two, five diver teams using Air with surface supplied dive gear and SCUBA diving equipment. From May 14, 2022 to August 2, 2022, four or five diver teams were deployed with the *Reef Ranger*, *Reef Tender*, *Scully*, and/or *Suncoaster* Dive Support Vessels (DSV). The combination of one to three DSV's working together, each with a four or five-diver team, collected a total of 7,500 tires. The *Reef Tender*, *Reef Tender*, *Scully*, and *Suncoaster* teams pre-rigged tires from the low-density hard bottom reef edge in Priority Area 1 along the west edge of the Osborne site, as per instructions from Pat Quinn PhD. Broward County ERM. These teams used an unmoored vessel technique that uses SCUBA equipped dive teams pre-rigging tires into 30 tire bundles. *Reef Tender*, *Scully*, and *Suncoaster* teams can pre-rig up to 1,500 tires to be recovered by the *Reef Ranger* when weather conditions are good enough for SCUBA diving operations but unfavorable for crane operations due to high wind or swells. IDC has also added a full-time coordinator to manage the higher volume of trailers (up to six per week) generated by the additional boats and crews, a full-time mechanic for outboard engine and crane maintenance and repair, and a shop worker dedicated to filling pressurized cylinders needed for both surface supplied and SCUBA diving. In addition, IDC purchased fifty 1 ¼" shackles and has made 200 extra tire slings which are dedicated for pre-rigging up to 1,500 tires for pick up by the *Reef Ranger* crane and 4 new cargo nets used to transport tires from the deck of the barge to the hauling container.

The 7,500 tires were recovered and emptied into ten 100 cubic yard trailers located at Berth 28F in Port Everglades. All diving was performed using surface supplied air diving practices with Kirby Morgan diving helmets using hard wired communications or a two-diver team using SCUBA gear and air breathing gas. All the tires collected by the *Reef Ranger* DSV were lifted in

Industrial Divers Corporation

30 tire clusters with the on-board crane. The tire bundles were placed in cargo nets lined with filter fabric which were deployed in the self-bailing hold of the *Reef Ranger*. The *Reef Tender*, *Scully*, and *Suncoaster* teams used an innovative pre-rigging method, the three teams used the 200 slings to pre-rig bundles of 30 tires, up to 1,500 tires for later collection by the *Reef Ranger* when the weather permits. The pre-rigged bundles have 30 tires each with a large 1 ¼” shackle connecting each bundle to the crane hook. Slings the tires together facilitates efficient picking of the load off the bottom by the *Reef Ranger* and allowed for efficient unloading into the 100 cubic yard trailers using a dedicated PEV certified land crane set up and operated by IDC at Berth 28F.

Trailer No. 486 had 900 tires (590 tires from Task 22 A and 310 Tires from Task 22 B), Trailer No. 487 had 990 tires, Trailer No. 488 had 900 tires, Trailer No. 489 had 900 tires, Trailer No. 490 had 900 tires, Trailer No. 491 had 600 tires, Trailer No. 492 had 900 tires, Trailer No. 493 had 900 tires, Trailer 494 had 900 tires, and Trailer 495 had the remaining had the remaining 200 tires and will be taken once it is full. The weight of the trucks with tires was more than 74,000 lbs. for each trailer load listed. The number of tires in each trailer varies based on the sand and crushed shell material found in the recovered tires. We make these adjustments to maintain a legal FDOT highway weight limit of 80,000 lbs.

There was no significant or persistent turbidity observed during the collection, transport and unloading of the tires. IDC has continued to adhere to all the permit requirements for this project while finding innovative ways to improve our safety while increasing our efficiency. The pre-rigging of tires by SCUBA diving teams working from our smaller DSVs the *Reef Tender*, *Scully*, and the *Suncoaster* is the way we are significantly increasing overall productivity and efficiency. This technique allows us to continue working in weather conditions that are unsuitable for crane operations offshore. In these less than favorable conditions we are unable to use mechanical lifting capabilities because of the rapid and unpredictable movement caused by wave turbulence and high wind, but we can safely deploy divers to collect and bundle tires on bottom where turbulent surface conditions will not affect them. These bundles are then picked up by the *Reef Ranger* when seas are more favorable for crane operations.

Task Order #22 B was invoiced on August 2, 2022. The total number of tires collected for SW238 through August 2, 2022 was 320,730. The total number of tires collected for SW232 and SW238 combined is 415,434 tires.

Industrial Divers Corporation

2901 SW 3rd Ave, Suite #5
Fort Lauderdale, FL 33315

(954) 523-2906 Office
(954) 525-6521 Fax

May 16, 2022

To: Michell Smith, Environmental Manager, Florida DEP
From: Rocco Galletta, Vice President, IDC

Re: Osborne Reef Tire Mitigation SW238-22: Progress Report Task 22 A

Industrial Divers Corporation (IDC) began Task Order No. SW238-22 Part A on November 4, 2021 with up to two, five diver teams using Air with surface supplied dive gear and SCUBA diving equipment. From November 4, 2021 to May 14, 2022, four or five diver teams were deployed with the *Reef Ranger*, *Reef Tender*, *Scully*, and/or *Suncoaster* Dive Support Vessels (DSV). The combination of one to three DSV's working together, each with a four or five-diver team, collected a total of 7,500 tires. The *Reef Tender*, *Reef Tender*, *Scully*, and *Suncoaster* teams pre-rigged tires from the low-density hard bottom reef edge in Priority Area 1 along the west edge of the Osborne site, as per instructions from Pat Quinn PhD. Broward County ERM. These teams used an unmoored vessel technique that uses SCUBA equipped dive teams pre-rigging tires into 30 tire bundles. *Reef Tender*, *Scully*, and *Suncoaster* teams can pre-rig up to 1,500 tires to be recovered by the *Reef Ranger* when weather conditions are good enough for SCUBA diving operations but unfavorable for crane operations due to high wind or swells. IDC has also added a full-time coordinator to manage the higher volume of trailers (up to six per week) generated by the additional boats and crews, a full-time mechanic for outboard engine and crane maintenance and repair, and a shop worker dedicated to filling pressurized cylinders needed for both surface supplied and SCUBA diving. In addition, IDC purchased fifty 1 ¼" shackles and has made 200 extra tire slings which are dedicated for pre-rigging up to 1,500 tires for pick up by the *Reef Ranger* crane and 4 new cargo nets used to transport tires from the deck of the barge to the hauling container.

The 7,500 tires were recovered and emptied into nine 100 cubic yard trailers located at Berth 28F in Port Everglades. All diving was performed using surface supplied air diving practices with Kirby Morgan diving helmets using hard wired communications or a two-diver team using SCUBA gear and air breathing gas. All the tires collected by the *Reef Ranger* DSV were lifted in

Industrial Divers Corporation

30 tire clusters with the on-board crane. The tire bundles were placed in cargo nets lined with filter fabric which were deployed in the self-bailing hold of the *Reef Ranger*. The *Reef Tender*, *Scully*, and *Suncoaster* teams used an innovative pre-rigging method, the three teams used the 200 slings to pre-rig bundles of 30 tires, up to 1,500 tires for later collection by the *Reef Ranger* when the weather permits. The pre-rigged bundles have 30 tires each with a large 1 ¼” shackle connecting each bundle to the crane hook. Slings the tires together facilitates efficient picking of the load off the bottom by the *Reef Ranger* and allowed for efficient unloading into the 100 cubic yard trailers using a dedicated PEV certified land crane set up and operated by IDC at Berth 28F.

Trailer No. 475 had 907 tires (207 tires from Task 21 B and 700 Tires from Task 22 A), Trailer No. 476 had 930 tires, Trailer No. 480 had 900 tires, Trailer No. 481 had 900 tires, Trailer No. 482 had 900 tires, Trailer No. 483 had 900 tires, Trailer No. 484 had 900 tires, Trailer No. 485 had 780 tires and Trailer 486 had the remaining had the remaining 590 tires and will be taken once it is full. The weight of the trucks with tires was more than 74,000 lbs. for each trailer load listed. The number of tires in each trailer varies based on the sand and crushed shell material found in the recovered tires. We make these adjustments to maintain a legal FDOT highway weight limit of 80,000 lbs.

There was no significant or persistent turbidity observed during the collection, transport and unloading of the tires. IDC has continued to adhere to all the permit requirements for this project while finding innovative ways to improve our safety while increasing our efficiency. The pre-rigging of tires by SCUBA diving teams working from our smaller DSVs the *Reef Tender*, *Scully*, and the *Suncoaster* is the way we are significantly increasing overall productivity and efficiency. This technique allows us to continue working in weather conditions that are unsuitable for crane operations offshore. In these less than favorable conditions we are unable to use mechanical lifting capabilities because of the rapid and unpredictable movement caused by wave turbulence and high wind, but we can safely deploy divers to collect and bundle tires on bottom where turbulent surface conditions will not affect them. These bundles are then picked up by the *Reef Ranger* when seas are more favorable for crane operations.

Task Order #22 A was invoiced on May 16, 2022. The total number of tires collected for SW238 through May 14, 2022 was 313,230. The total number of tires collected for SW232 and SW238 combined is 407,934 tires.