### MAC Recommendations for 45' Project Channel Transition- Delaware River 1.18.2018

As of March 15, 2018, the USACE expects completion of 45' deepening work on both sides of the Delaware Bay and River navigable channel from sea to Beckett Street Terminal (Balzano), with the following exceptions: Upper Bellevue Range GREEN side, Marcus Hook Range GREEN side, Chester Range GREEN side, Eddystone Range GREEN side, lower Tinicum Island Range GREEN side. The aforementioned areas are scheduled for completion by October 31, 2018. Based on the planned project schedule, the MAC recommends the following phased transition to full utilization of the 45' project channel, subject to MAC Transit Advisories and the Mariners' Advisory Committee ULCV Transit Recommendations.

All recommendations are contingent upon successful completion of deepening/dredging, surveys/acceptance of Delaware River Main Channel Deepening Project by USACE.

#### Other considerations:

- -Available depths at piers/ plans to dredge terminals
- -Deepening/dredging/planned maintenance of turning area for ULCV's off Packer Avenue Terminal
- -Pilots' Association/MAC shall review transit experiences and base scale-up considerations at each level on lessons learned as well as most recent channel survey data.

### Stage One Transit Advisories

- -The maximum fresh water draft for river transit from sea to Beckett Street is 42 feet. This 42' draft restriction shall be effective for a period of not less than 6 months. During this time period, a minimum of six round-trip vessel transits (six inbound/six outbound) in excess of 40' draft shall be safely completed before consideration of scaling up draft restrictions.
- -Lower end of Marcus Hook Anchorage shall be reserved as a bail out/turnaround location for vessels whose draft exceeds 40' fresh water. (insert particulars)
- -All vessels arriving with a fresh water draft in excess of 39' are to transit during flood current only.
- -All vessels over Panamax size beam (106 feet) with a block coefficient of .70 and above (see appendix) having a fresh water draft in excess of 37'-06, shall only transit during flood current.
- All vessels up to and including Panamax size beam (106 feet) having a fresh water draft of 39 feet and under should arrange their river transit to afford a minimum of three feet clearance in the Marcus Hook area. The clearance should give due consideration to vessel squat, predicted tide, and the wind effect on actual tide.
- Vessels outbound from Paulsboro, NJ and above, having a fresh water draft of 39 feet and up to 42 feet should arrange to sail 2 hours after low water. Due to the extended time of transit for these particular deep draft vessels, two (2) river pilots will be arranged for transit to sea.

### Stage Two Transit Advisories

-The maximum fresh water draft for river transit from sea to Beckett Street is 43 feet. This 43' draft restriction shall be effective for a period of not less than 3 months. During this time period, a minimum of three round-trip vessel transits (three inbound/three outbound) in excess of 41' draft shall be safely completed before consideration of scaling up draft restrictions.

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- -Lower end of Marcus Hook Anchorage shall be reserved as a bail out/turnaround location for vessels whose draft exceeds 40' fresh water.
- -All vessels arriving with a fresh water draft in excess of 40' are to transit during flood current only.
- -All vessels over Panamax size beam (106 feet) with a block coefficient of .70 and above (see appendix) having a fresh water draft in excess of 38'-06", shall only transit during flood current.
- All vessels up to and including Panamax size beam (106 feet) having a fresh water draft of 40 feet and under should arrange their river transit to afford a minimum of three feet clearance in the Marcus Hook area. The clearance should give due consideration to vessel squat, predicted tide, and the wind effect on actual tide.
- Vessels outbound from Paulsboro, NJ and above, having a fresh water draft of 40 feet and up to 43 feet should arrange to sail 2 hours after low water. Due to the extended time of transit for these particular deep draft vessels, two (2) river pilots will be arranged for transit to sea.

### Stage Three Transit Advisories

- -The maximum fresh water draft for river transit from sea to Beckett Street is 44 feet. This 44' draft restriction shall be effective for a period of not less than 3 months. During this time period, a minimum of three round-trip vessel transits (three inbound/three outbound) in excess of 42' draft shall be safely completed before consideration of scaling up draft restrictions.
- -Lower end of Marcus Hook Anchorage shall be reserved as a bail out/turnaround location for vessels whose draft exceeds 40' fresh water.
- -All vessels arriving with a fresh water draft in excess of 41' are to transit during flood current only.
- -All vessels over Panamax size beam (106 feet) with a block coefficient of .70 and above (see appendix) having a fresh water draft in excess of 39'-06", shall only transit during flood current.
- All vessels up to and including Panamax size beam (106 feet) having a fresh water draft of 41 feet and under should arrange their river transit to afford a minimum of three feet clearance in the Marcus Hook area. The clearance should give due consideration to vessel squat, predicted tide, and the wind effect on actual tide.
- Vessels outbound from Paulsboro, NJ and above, having a fresh water draft of 41 feet and up to 44 feet should arrange to sail 2 hours after low water. Due to the extended time of transit for these particular deep draft vessels, two (2) river pilots will be arranged for transit to sea.

### Stage Four Transit Advisories

- -The maximum fresh water draft for river transit from sea to Beckett Street is 45 feet.
- -Lower end of Marcus Hook Anchorage shall be reserved as a bail out/turnaround location for vessels whose draft exceeds 40' fresh water.
- -All vessels arriving with a fresh water draft in excess of 42' are to transit during flood current only.
- -All vessels over Panamax size beam (106 feet) with a block coefficient of .70 and above (see appendix) having a fresh water draft in excess of 40'-06", shall only transit during flood current.
- All vessels up to and including Panamax size beam (106 feet) having a fresh water draft of 42 feet and under should arrange their river transit to afford a minimum of three

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feet clearance in the Marcus Hook area. The clearance should give due consideration to vessel squat, predicted tide, and the wind effect on actual tide.

- Vessels outbound from Paulsboro, NJ and above, having a fresh water draft of 42 feet and up to 45 feet should arrange to sail 2 hours after low water. Due to the extended time of transit for these particular deep draft vessels, two (2) river pilots will be arranged for transit to sea.

