Tesoro Logistics Operations LLC (TLO)*
Terminal 1, Long Beach
At Berth Terminal Plan

This terminal plan has been prepared pursuant Section 93130.14(a)(3) of the Airborne Toxic Control Measure for Auxiliary Diesel Engines Operated on Ocean-Going Vessels At Berth in a California Port.

*Tesoro Logistics Operations LLC is the terminal operator for Carson Cogeneration LLC, the leaseholder with the Port of Long Beach.

1. GENERAL INFORMATION

Terminal Contact Name: Timothy Hayes

Phone Number: 562-499-2249 | Email: twhayes@marathonpetroleum.com

Berths Included in this Plan:

Name:	Approximate Geographic Boundary Coordinates:*
1. Berth T121	1. 33.75713, -118.21901

**The number of berths on a terminal and the spatial positioning of berths are dependent on vessel size; thus, the geographic boundary coordinates are approximates only.*

2. STRATEGY DETAILS

Strateg(ies) used to comply with the requirements for ocean-going vessels visiting each berth:

Provided technology is sufficiently developed to operate with an acceptable level of personal and process safety risk, Tesoro Logistics Operations LLC (TLO) plans to employ the following strategies.

1. Use of current shore power system.
2. CARB-Approved Capture and Control System as a CARB-Approved Emission Control Strategy (CAECS)
3. CARB-Approved Innovative Concept – See TLO's Innovative Concept Application for Long Beach

2.1 [**Strategy 1**]

Identification and description of all necessary equipment:

Equipment:	Location:
1. Shore Power (currently installed on a dedicated dolphin) a. Vessel connection is port side only, connecting at the rear of the vessel b. 60 Hz, 6.6kV, 900A, 10,288kVA	1. Terminal 1, Berth T121

Number of **vessels** expected to use this strategy (annual): 1 initially, increasing as ships adopt shore power technology

Number of vessel **visits** expected to use this strategy (annual): 14 initially, increasing as ships adopt shore power technology

Berths where equipment will be used:

1. Berth T121

Schedule for installing equipment:

Project:

1. Not applicable – already installed

Estimated Completion Date:

1. Not applicable – already installed

2.2 [**Strategy 2]**

Identification and description of all necessary equipment:

Equipment:

1. CARB Approved Capture and Control System – will include one or more of the following shore and/or barge unit(s)
    a. Fully contained barge system including connection system and treatment system
    b. Barge connection system with shore-based treatment system
    c. Permanent structure connection system with shore-based treatment system

Location:

1. Terminal 1, Berth T121

Number of **vessels** expected to use this strategy (annual): 100

Number of vessel **visits** expected to use this strategy (annual): 250

Berths where equipment will be used:

1. Berth T121

Schedule for installing equipment:

Project:

1. CARB Approved Capture and Control System

Estimated Completion Date:

- 9/1/2026*: Barge Based Capture & Control ("C&C")
    - C&C estimates assume technology is proven safe, controls all emission sources required in the regulation, and the CARB Executive Officer has approved a system by the end of 2023. Given the complexity of tankers, this timeline is viewed as the least certain and with a reasonable probability of extending beyond 2023.
- 9/1/2028*: Shore-Based Capture & Control ("C&C")
    - C&C estimates assume technology is proven safe, controls all emission sources required in the regulation, and the CARB Executive Officer has approved a system by the end of 2023. Given the complexity of tankers, this timeline is viewed as the least certain and with a reasonable probability of extending beyond 2023.
- 9/1/2028: Shore Power (Terminal Project Only)
    - Shore Power schedule assumes electric utility can meet the proposed construction schedule and grid is sufficient to handle the increased power demand. Estimated completion date does not

reflect timeline for ships to convert to connect to shore power.

TLO has not selected a primary control mechanism and may rely on various technologies at a single terminal to reduce emissions from vessels at TLO's berths. The technology selection will consider the safety of personnel, the safe passage of adjacent marine traffic, and the significant land use constraints at TLO's terminals. TLO is presently engaged in an extensive Feasibility Engineering Analysis investigating each known technology, shore power, shore-based C&C, and barge-based C&C, this analysis will allow for TLO to identify the most appropriate technologies for each berth. The analysis is scheduled to conclude in the 4th quarter of 2022.

*Any unmitigated risks detailed below may result in a change to the Estimated Completion Date stated above.

- Full resolution of considerations identified in the Safety Study under the CARB grant for C&C Systems for Oil Tanker Project awarded to SCAQMD where TLO resources are actively supporting advancement as a demonstration partner.
- Full resolution of considerations from future safety studies and hazard assessments which TLO anticipates and view as necessary to ensure safe operations on tanker vessels
- Stack connection design:
    - C&C providers have not shared technical details for connection to the vessel stacks to TLO.
        - Ability to connect to as many as six or more stacks at the same time without damaging a vessel's exhaust stacks.
        - Ability to connect to a variable set of stack configurations without damaging the vessel's exhaust stacks.
        - Ability to connect without creating sparks, or designing for electrical continuity
        - Ability of the connection to adjust with vessel draft and pitch changes due to cargo operations
        - Ability of connection system to adequately transport a wide range of flow rates from multiple stacks
- Barge congestion and siting around vessels
    - C&C barges must not interfere with adjacent vessel traffic in the port

- C&C barges must stay clear of mooring lines of the vessel at berth
- C&C barges must not interfere with containment boom
- C&C barge mooring systems must not impact submerged utilities crossing navigational channels

- Adequate emergency preparedness to ensure safety of barge-based system operators near hazardous cargo
- Treatment system performance meets or exceeds emission reduction requirements for all emissions sources that are required to be controlled on tankers
- Construction schedule for multiple systems, including CEQA Permitting timelines for land-based systems.

2.3 **[Strategy 3, if needed]**

Identification and description of all necessary equipment:

Equipment:	Location:
1. Innovative concept – see "Innovative Concept Application" submittal	1. Innovative concept – see "Innovative Concept Application" submittal

Number of **vessels** expected to use this strategy (annual): TBD

Number of vessel **visits** expected to use this strategy (annual): TBD

Berths where equipment will be used:

1. See "Innovative Concept Application" submittal

Schedule for installing equipment:

Project:	Estimated Completion Date:
1. See "Innovative Concept Application" submittal	1. See "Innovative Concept Application" submittal

3. TERMINAL OPERATOR/PORT BERTHING RESTRICTIONS

Are there any terminal or port specific berthing restrictions? If yes, please describe.

1. Vessels are restricted to berthing port side to only.
2. Underwater utilities located near the vessel berthing locations could restrict capture and control mooring systems.

4. DIVISION OF ROLES AND RESPONSIBILITIES

Division of responsibilities:

Note: this plan does not amend or modify the terms and/or the conditions of Tesoro Refining & Marketing Company LLC's preferential assignment agreement and other agreements with the Port, including without limitation expiration dates, nor does it amend or modify the terms and/or conditions of any agreements of the Port of Long Beach and/or of Tesoro Refining & Marketing Company LLC with other entities nor does it modify or diminish any other obligations of other entities to the Port of Long Beach and/or Tesoro Refining & Marketing Company LLC.

	Port	Terminal
Initiation of electrical infrastructure construction including design		✓
Responsibility to provide equipment or necessary electrical infrastructure inside of the terminal		✓
Responsibility to maintain electrical infrastructure inside of the terminal		✓
Responsibility of uncontrolled emissions at berth due to incomplete electrical infrastructure construction		✓
Responsibility of uncontrolled emissions during repair of electrical infrastructure/equipment		✓
Submission of terminal plan		✓
Submission of port plan	✓	

Are there any contractual limitations applicable to the terminal relevant to enacting the infrastructure? If yes, describe.
None

Port approval of responsibilities:
Set forth in Section 4 of this At Berth Terminal Plan, the Port's responsible official confirms by signing below that he/she has reviewed the division of responsibilities and agrees to them under penalty of perjury. The Port does not make any representations about the accuracy, feasibility, or legality of Tesoro Refining & Marketing Company LLC proposed compliance strategy set forth in this At Berth Terminal Plan.

Name: Title:

Port:

Signature: *Date:*

5. SIGNATURE OF TERMINAL OPERATOR

By signing below, Carson Cogeneration LLC's responsible official confirms under penalty of perjury that he/she has reviewed this At Berth Terminal Plan and is submitting this At Berth Terminal Plan as Carson Cogeneration LLC*'s compliance strategy for the At Berth Regulation.* Carson Cogeneration LLC *understands this plan is subject to verification by CARB staff.*

Name: Timothy Hayes Title: Region Manager

Signature: Timothy W. Hayes Date: 5-27-2022

Tesoro Logistics Operations LLC (TLO)*
Terminal 2, Long Beach
At Berth Terminal Plan

This terminal plan has been prepared pursuant Section 93130.14(a)(3) of the Airborne Toxic Control Measure for Auxiliary Diesel Engines Operated on Ocean-Going Vessels At Berth in a California Port.

*Tesoro Logistics Operations LLC is the terminal operator for Tesoro Refining & Marketing Company LLC, the leaseholder with the Port of Long Beach.

1. GENERAL INFORMATION

Terminal Contact Name: Timothy Hayes

Phone Number: 562-499-2249	Email: twhayes@marathonpetroleum.com

Berths Included in this Plan:

Name:	Approximate Geographic Boundary Coordinates:*
1. Berth B77	1. 33.77580, -118.21300
2. Berth B78	2. 33.77501, -118.21501

Berth B76 handles liquids but is barge only.
Berths B79 and B80 are not in service.

**The number of berths on a terminal and the spatial positioning of berths are dependent on vessel size; thus, the geographic boundary coordinates are approximates only.*

2. STRATEGY DETAILS

Strateg(ies) used to comply with the requirements for ocean-going vessels visiting each berth:

Provided technology is sufficiently developed to operate with an acceptable level of personal and process safety risk, TLO plans to employ the following strategies:

1. CARB-Approved Capture and Control (C&C) System as a CARB-Approved Emission Control Strategy (CAECS)
2. CARB-Approved Innovative Concept – See TLO's Innovative Concept Application for Long Beach

Should tanker vessel owners install equipment that provides a vessel side connection for shore power in the future, TLO may consider adding new land-based connection systems to supply electricity from the grid to a vessel.

2.1 **[Strategy 1]**

Identification and description of all necessary equipment:

Equipment:	Location:
1. CARB Approved Capture and Control Systems - will include one or more of the following shore and/or barge unit(s)	1. Terminal 2, Berths B77, B78

a. Fully contained barge system including connection system and treatment system
b. Barge connection system with shore-based treatment system
c. Permanent structure connection system with shore-based treatment system
d. Mobile land-based connection system with mobile or fixed shore-based treatment system

Number of **vessels** expected to use this strategy (annual): 25

Number of vessel **visits** expected to use this strategy (annual): 100

Berths where equipment will be used:

1. Berth 77
2. Berth 78

Schedule for installing equipment:

Project:	Estimated Completion Date:

CARB Approved Capture and Control Systems	• 9/1/2026*: Barge Based Capture & Control ("C&C")
	  • C&C estimates assume technology is proven safe, controls all emission sources required in the regulation, and the CARB Executive Officer has approved a system by the end of 2023. Given the complexity of tankers, this timeline is viewed as the least certain and with a reasonable probability of extending beyond 2023.
	• 9/1/2028*: Shore-Based Capture & Control ("C&C")
	  • C&C estimates assume technology is proven safe, controls all emission sources required in the regulation, and the CARB Executive Officer has approved a system by the end of 2023. Given the complexity of tankers, this timeline is viewed as the least certain and with a reasonable probability of extending beyond 2023.
	• 9/1/2028: Shore Power (Terminal Project Only)
	  • Shore Power schedule assumes electric utility can meet the proposed construction schedule and grid is sufficient to handle the increased power demand. Estimated completion date does not reflect timeline for ships to convert to connect to shore power.
	
	TLO has not selected a primary control mechanism and may rely on various technologies at a single terminal to reduce emissions from vessels at TLO's berths. The technology selection will consider the safety of personnel, the safe passage of adjacent marine traffic, and the significant land use constraints at TLO's terminals. TLO is presently engaged in an extensive Feasibility Engineering Analysis

investigating each known technology, shore power, shore-based C&C, and barge-based C&C, this analysis will allow for TLO to identify the most appropriate technologies for each berth. The analysis is scheduled to conclude in the 4th quarter of 2022.

*Any unmitigated risks detailed below may result in a change to the Estimated Completion Date stated above.

- Full resolution of considerations identified in the Safety Study under the CARB grant for C&C Systems for Oil Tanker Project awarded to SCAQMD where TLO resources are actively supporting advancement as a demonstration partner.
- Full resolution of considerations from future safety studies and hazard assessments which TLO anticipates and view as necessary to ensure safe operations on tanker vessels
- Stack connection design:
    - C&C providers have not shared technical details for connection to the vessel stacks to TLO.
        - Ability to connect to as many as six or more stacks at the same time without damaging a vessel's exhaust stacks.
        - Ability to connect to a variable set of stack configurations without damaging the vessel's exhaust stacks.
        - Ability to connect without creating sparks, or designing for electrical continuity
        - Ability of the connection to adjust with vessel draft and pitch changes due to cargo operations
        - Ability of connection system to adequately transport a wide range of flow rates from multiple stacks
- Barge congestion and siting around vessels
    - C&C barges must not interfere with adjacent vessel traffic in the port
    - C&C barges must stay clear of mooring lines of the vessel at berth
    - C&C barges must not interfere with containment boom
    - C&C barge mooring systems must not impact submerged utilities crossing navigational channels
- Adequate emergency preparedness to ensure safety of barge-based system operators near hazardous cargo
- Treatment system performance meets or exceeds emission reduction requirements for all emissions sources that are required to be controlled on tankers

- Construction schedule for multiple systems, including CEQA permitting timelines for land-based systems.

2.2 **[Strategy 2, if needed]**

Identification and description of all necessary equipment:

Equipment:	Location:
1. Innovative concept – see "Innovative Concept Application" submittal	1. Innovative concept – see "Innovative Concept Application" submittal

Number of **vessels** expected to use this strategy (annual): TBD

Number of vessel **visits** expected to use this strategy (annual): TBD

Berths where equipment will be used:

1. See "Innovative Concept Application" submittal

Schedule for installing equipment:

Project:	Estimated Completion Date:
1. See "Innovative Concept Application" submittal	1. See "Innovative Concept Application" submittal

3. TERMINAL OPERATOR/PORT BERTHING RESTRICTIONS

Are there any terminal or port specific berthing restrictions? If yes, please describe.

1. Vessels calling at Berth B78 in crude petroleum and heavy intermediate petroleum product service are restricted to starboard side to only.
2. Future dock enhancements necessary to accommodate capture and control systems could necessitate additional berthing restrictions.
3. Underwater utilities located near the vessel berthing locations could restrict mooring systems for barge-based capture and control.

4. DIVISION OF ROLES AND RESPONSIBILITIES

Division of responsibilities:

Note: this plan does not amend or modify the terms and/or the conditions of Tesoro Refining & Marketing Company LLC's preferential assignment agreement and other agreements with the Port, including without limitation expiration dates, nor does it amend or modify the terms and/or conditions of any agreements of the Port of Long Beach and/or of Tesoro Refining & Marketing Company LLC with other entities nor does it modify or diminish any other obligations of other entities to the Port of Long Beach and/or Tesoro Refining & Marketing Company LLC.

	Port	Terminal
Initiation of electrical infrastructure construction including design		✓

Responsibility to provide equipment or necessary electrical infrastructure inside of the terminal		✓
Responsibility to maintain electrical infrastructure inside of the terminal		✓
Responsibility of uncontrolled emissions at berth due to incomplete electrical infrastructure construction		✓
Responsibility of uncontrolled emissions during repair of electrical infrastructure/equipment		✓
Submission of terminal plan		✓
Submission of port plan	✓	

Are there any contractual limitations applicable to the terminal relevant to enacting the infrastructure? If yes, describe.
None

Port approval of responsibilities:
Set forth in Section 4 of this At Berth Terminal Plan, the Port's responsible official confirms by signing below that he/she has reviewed the division of responsibilities and agrees to them under penalty of perjury. The Port does not make any representations about the accuracy, feasibility, or legality of Tesoro Refining & Marketing Company LLC proposed compliance strategy set forth in this At Berth Terminal Plan.

Name: Title:

Port:

Signature: Date:

5. SIGNATURE OF TERMINAL OPERATOR

By signing below, Tesoro Logistics Operations LLC's responsible official confirms under penalty of perjury that he/she has reviewed this At Berth Terminal Plan and is submitting this At Berth Terminal Plan as Tesoro Logistics Operations LLC's compliance strategy for the At Berth Regulation. Tesoro Logistics Operations understands this plan is subject to verification by CARB staff.

Name: Timothy Hayes Title: Region Manager

Signature: Timothy W. Hayes Date: 5-27-2022

Tesoro Logistics Operations LLC (TLO)*
Long Beach Terminal (LBT), Long Beach
At Berth Terminal Plan

This terminal plan has been prepared pursuant Section 93130.14(a)(3) of the Airborne Toxic Control Measure for Auxiliary Diesel Engines Operated on Ocean-Going Vessels At Berth in a California Port.

*Tesoro Logistics Operations LLC is the terminal operator for Tesoro Refining & Marketing Company LLC, the leaseholder with the Port of Long Beach.

1. GENERAL INFORMATION

Terminal Contact Name: Timothy Hayes

Phone Number: 562-499-2249	Email: twhayes@marathonpetroleum.com

Berths Included in this Plan:

Name:	Approximate Geographic Boundary Coordinates:*
1. Berth B84a	1. 33.77236, -118.22173
2. Berth B86	2. 33.77104, -118.22411

Berths B84a and B86 are the only berths at the terminal which receive tanker vessels.

**The number of berths on a terminal and the spatial positioning of berths are dependent on vessel size; thus, the geographic boundary coordinates are approximates only.*

2. STRATEGY DETAILS

Strateg(ies) used to comply with the requirements for ocean-going vessels visiting each berth:

Provided technology is sufficiently developed to operate with an acceptable level of personal and process safety risk, Tesoro Logistics Operations LLC plans to employ the following strategies.

1. CARB-Approved Capture and Control System as a CARB-Approved Emission Control Strategy (CAECS)
2. CARB-Approved Innovative Concept – See TLO's Innovative Concept Application for Long Beach

Should tanker vessel owners install equipment that provides a vessel side connection for shore power in the future, TLO may consider adding new land-based connection systems to supply electricity from the grid to a vessel.

2.1 **[Strategy 1]**

Identification and description of all necessary equipment:

Equipment:	Location:
1. CARB Approved Capture and Control Systems - will include one or more of the following shore and/or barge unit(s)	1. Long Beach Terminal, Berths B84a, B86

a. Fully contained barge system including connection system and treatment system
b. Barge connection system with shore-based treatment system
c. Permanent structure connection syste with shore-based treatment system
d. Mobile land-based connection system with mobile or fixed shore-based treatment system

Number of **vessels** expected to use this strategy (annual): 70

Number of vessel **visits** expected to use this strategy (annual): 190

Berths where equipment will be used:

1. Berth B84a
2. Berth B86

Schedule for installing equipment:

Project:	Estimated Completion Date:

CARB Approved Capture and Control Systems	• 9/1/2026*: Barge Based Capture & Control ("C&C")
	  • C&C estimates assume technology is proven safe, controls all emission sources required in the regulation, and the CARB Executive Officer has approved a system by the end of 2023. Given the complexity of tankers, this timeline is viewed as the least certain and with a reasonable probability of extending beyond 2023.
	• 9/1/2028*: Shore-Based Capture & Control ("C&C")
	  • C&C estimates assume technology is proven safe, controls all emission sources required in the regulation, and the CARB Executive Officer has approved a system by the end of 2023. Given the complexity of tankers, this timeline is viewed as the least certain and with a reasonable probability of extending beyond 2023.
	• 9/1/2028: Shore Power (Terminal Project Only)
	  • Shore Power schedule assumes electric utility can meet the proposed construction schedule and grid is sufficient to handle the increased power demand. Estimated completion date does not reflect timeline for ships to convert to connect to shore power.
	
	TLO has not selected a primary control mechanism and may rely on various technologies at a single terminal to reduce emissions from vessels at TLO's berths. The technology

selection will consider the safety of personnel, the safe passage of adjacent marine traffic, and the significant land use constraints at TLO's terminals. TLO is presently engaged in an extensive Feasibility Engineering Analysis investigating each known technology, shore power, shore-based C&C, and barge-based C&C, this analysis will allow for TLO to identify the most appropriate technologies for each berth. The analysis is scheduled to conclude in the 4th quarter of 2022.

*Any unmitigated risks detailed below may result in a change to the Estimated Completion Date stated above.

- Full resolution of considerations identified in the Safety Study under the CARB grant for C&C Systems for Oil Tanker Project awarded to SCAQMD where TLO resources are actively supporting advancement as a demonstration partner.
- Full resolution of considerations from future safety studies and hazard assessments which TLO anticipates and view as necessary to ensure safe operations on tanker vessels
- Stack connection design:
    - C&C providers have not shared technical details for connection to the vessel stacks to TLO.
        - Ability to connect to as many as six or more stacks at the same time without damaging a vessel's exhaust stacks.
        - Ability to connect to a variable set of stack configurations without damaging the vessel's exhaust stacks.
        - Ability to connect without creating sparks, or designing for electrical continuity
        - Ability of the connection to adjust with vessel draft and pitch changes due to cargo operations
        - Ability of connection system to adequately transport a wide range of flow rates from multiple stacks
- Barge congestion and siting around vessels
    - C&C barges must not interfere with adjacent vessel traffic in the port
    - C&C barges must stay clear of mooring lines of the vessel at berth
    - C&C barges must not interfere with containment boom
    - C&C barge mooring systems must not impact submerged utilities crossing navigational channels

- Adequate emergency preparedness to ensure safety of barge-based system operators near hazardous cargo
- Treatment system performance meets or exceeds emission reduction requirements for all emissions sources that are required to be controlled on tankers
- Construction schedule for multiple systems, including CEQA permitting timelines for land-based systems

2.2 **[Strategy 2, if needed]**

Identification and description of all necessary equipment:

Equipment:	Location:
1. Innovative concept – see "Innovative Concept Application" submittal	1. Innovative concept – see "Innovative Concept Application" submittal

Number of **vessels** expected to use this strategy (annual): TBD

Number of vessel **visits** expected to use this strategy (annual): TBD

Berths where equipment will be used:

1. See "Innovative Concept Application" submittal

Schedule for installing equipment:

Project:	Estimated Completion Date:
1. See "Innovative Concept Application" submittal	1. See "Innovative Concept Application" submittal

3. TERMINAL OPERATOR/PORT BERTHING RESTRICTIONS

Are there any terminal or port specific berthing restrictions? If yes, please describe.

1. Presently there are no restrictions however dock enhancements necessary to accommodate capture and control systems could necessitate berthing restrictions.
2. Underwater utilities located near the vessel berthing locations could restrict mooring systems for barge-based capture and control.

4. DIVISION OF ROLES AND RESPONSIBILITIES

Division of responsibilities:

Note: this plan does not amend or modify the terms and/or the conditions of Tesoro Refining & Marketing Company LLC's preferential assignment agreement and other agreements with the Port, including without limitation expiration dates, nor does it amend or modify the terms and/or conditions of any agreements of the Port of Long Beach and/or of Tesoro Refining & Marketing Company LLC with other entities nor does it modify or diminish any other obligations of other entities to the Port of Long Beach and/or Tesoro Refining & Marketing Company LLC.

	Port	Terminal

Initiation of electrical infrastructure construction including design		✓
Responsibility to provide equipment or necessary electrical infrastructure inside of the terminal		✓
Responsibility to maintain electrical infrastructure inside of the terminal		✓
Responsibility of uncontrolled emissions at berth due to incomplete electrical infrastructure construction		✓
Responsibility of uncontrolled emissions during repair of electrical infrastructure/equipment		✓
Submission of terminal plan		✓
Submission of port plan	✓	

Are there any contractual limitations applicable to the terminal relevant to enacting the infrastructure? If yes, describe.
None

Port approval of responsibilities:
Set forth in Section 4 of this At Berth Terminal Plan, the Port's responsible official confirms by signing below that he/she has reviewed the division of responsibilities and agrees to them under penalty of perjury. The Port does not make any representations about the accuracy, feasibility, or legality of Tesoro Refining & Marketing Company LLC proposed compliance strategy set forth in this At Berth Terminal Plan.

Name: Title:

Port:

Signature: *Date:*

5. SIGNATURE OF TERMINAL OPERATOR

By signing below, Tesoro Logistics Operations LLC's responsible official confirms under penalty of perjury thathe/she has reviewed this At Berth Terminal Plan and is submitting this At Berth Terminal Plan as Tesoro Logistics Operations LLC's compliance strategy for the At Berth Regulation. Tesoro Logistics Operations understands this plan is subject to verification by CARB staff.

Name: Timothy Hayes Title: Region Manager

Signature: Timothy K. Hayes Date: 5-27-2022