15 April 2025

MEMORANDUM FOR THE RECORD

Subj: ADDITIONAL CONSULTATION INFORMATION SUPPORTING THE U.S. NAVY'S PORT DAMAGE REPAIR PILE DRIVING ACTIVITIES IN PORT HUENEME CA

1. Pursuant to the Marine Mammal Protection Act (MMPA), the U.S. Navy (Navy) requested an Incidental Harassment Authorization for activities associated with Port Damage Repair (PDR) pile driving and extraction training within Port Hueneme California.

2. The National Marine Fisheries Service published a Proposed Rule for PDR pile driving on October 23, 2024. From January-February 2025, the Navy sought additional clarification on any revised pile driving training needs to account for exercises planned through December 31, 2025. While some aspects of the training and subsequent analysis have changed, the Navy believes all changes to not be substantially different from NMFS' Proposed Rule.

3. Enclosure 1 contains the Navy's proposed revisions to NMFS' Proposed Rule tables to help expedite the publication of the PDR Final Rule.

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Enclosure 1. Revision on NMFS Propose Rule Tables

Enclosure 1. Revision on NMFS Propose Rule Tables

The Navy has updated the October 23, 2024 Proposed Rule tables below with changes required based on operator review of pending exercises through December 31, 2025.

Table requiring adjustments include:

- Table 1- SUMMARY OF PILE DETAILS AND ESTIMATED PRODUCTION RATES FOR PILE INSTALLATION AND REMOVAL DURING EACH TRAINING EXERCISE FOR THE
- Table 6- NMFS USER SPREADSHEET INPUTS
- Table 7- CALCULATED DISTANCES AND AREAS TO THE ESTIMATED LEVEL A (BASED ON NMFS' 2018 TECHNICAL GUIDANCE AND NMFS' PROPOSED 2024 UPDATE TO THE 2018 TECHNICAL GUIDANCE) AND LEVEL B HARASSMENT THRESHOLDS BY PILE TYPE AND PILE DRIVING METHOD FOR THE INITIAL AND PROPOSED IHAS
- Table 9- PROPOSED SHUTDOWN ZONES DURING IN-WATER PILE DRIVING ACTIVITIES FOR THE INITIAL AND PROPOSED IHAS

Red font is used to indicate new values. Strike through font indicates what Navy suspects are incorrect values in the Proposed Rule.

TABLE 1- SUMMARY OF PILE DETAILS AND ESTIMATED PRODUCTION RATES FOR PILE INSTALLATION AND REMOVAL DURING EACH TRAINING EXERCISE FOR THE INITIAL AND PROPOSE IHAS

Pile size/type/shape	Authorization	Number of sheets / piles	Vibratory installation/ removal duration per pile	Potential impact strikes per pile, if needed	Production rate (piles/day)				Days of installation	Days of removal	Buffer days [1]	Total days per exercise
					Installation		Removal					
					Vibratory hammer	Impact hammer	Vibratory hammer	Impact hammer				
24-in Steel Sheet	Initial IHA	15	10/20 minutes	NA	3	3	3	NA	5	5	0	10
	Proposed IHA	30	10/30 minutes	NA	30	NA	30	NA	1	1	12	14
	Revised IHA	30	7/7 minutes	NA	30	NA	30	NA	1	1	12	14
~~12~~ 16-in Timber Pile	Initial IHA	10	20/30 minutes	1,800	2	2	2	NA	5	5	0	10
	Proposed IHA	12	20/30 minutes	1,800	12	6	12	NA	2	1	7	10
	Revised IHA	12	10/7 minutes	1,800	12	6	12	NA	1	1	7	9
14-in H-Beam Pile	Initial IHA	4	20/30 minutes	1,800	2	2	2	NA	2	2	0	4
	Proposed IHA	6	20/30 minutes	1,800	6	2	6	NA	3	1	6	10
	Revised IHA	6	20/30 minutes	1,800	6	2	6	NA	1	1	6	8
16-in Plastic Pile	Initial IHA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Proposed IHA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Revised IHA	12	5/5 minutes	500	12	6	12	NA	1	1	7	9
Totals for the Initial IHA			7.17 hours/12 hours	.....	.....	.....	NA	NA	12	12	0	24
Totals for the Proposed IHA			11 hours/24 hours	.....	.....	.....	NA	NA	6	3	25	34
Totals for the Revised IHA			21.25 hours/22.25 hours	.....	.....	.....	NA	NA	4	4	32	40

[1] Buffer days are included in the proposed IHA to allow for unanticipated variation in production rates and to account for any training that is slowed or delayed due to the need to meet specific training or mitigation requirements; buffer days were not considered in the initial IHA.

TABLE 6- NMFS USER SPREADSHEET INPUTS

	Metric	PLASTIC PILES	TIMBER PILES		H PILES		SHEET PILES	
		REVISED (NEW)	CURRENT	REVISED	CURRENT	REVISED	CURRENT	REVISED
Vibratory Extraction	Sound Pressure Level (L_{rms}), specified at "x" meters (Cell B30)	162	162	162	147	147	159	159
	Number of piles within 24-h period	12	12	12	6	6	30	30
	Duration to drive a single pile (minutes)	5	30	10	30	30	30	7
	Duration of Sound Production within 24-h period (seconds)	3600	21600	7200	10800	10800	54000	12600
	10 Log (duration of sound production)	35.56	43.34	38.57	40.33	40.33	47.32	41.00
	Transmission loss coefficient	15	15	15	15	15	15	15
	Distance of sound pressure level (L_{rms}) measurement (meters)	10	10	10	10	10	10	10
	Phocid	**13.8**	**45.7**	**22.0**	**2.9**	**2.9**	**53.1**	**20.1**
	Otariid	**4.7**	**15.4**	**7.4**	**1.0**	**1.0**	**17.9**	**7.4**
	MONITORED	**25**	**50**	**25**	**20**	**25**	**60**	**25**
Vibratory Driving	Sound Pressure Level (L_{rms}), specified at "x" meters (Cell B30)	162	162	162	147	147	159	159
	Number of piles within 24-h period	12	12	12	6	6	30	30
	Duration to drive a single pile (minutes)	5	20	7	30	30	20	7
	Duration of Sound Production within 24-h period (seconds)	3600	14400	5040	10800	10800	36000	12600
	10 Log (duration of sound production)	35.56	41.58	37.02	40.33	40.33	45.56	41.00
	Transmission loss coefficient	15	15	15	15	15	15	15
	Distance of sound pressure level (L_{rms}) measurement (meters)	10	10	10	10	10	10	10
	Phocid	**13.8**	**34.9**	**17.3**	**2.9**	**2.9**	**40.5**	**20.1**
	Otariid	**4.7**	**11.7**	**5.8**	**1.0**	**1.0**	**13.6**	**6.8**
	MONITORED	**25**	**50**	**25**	**20**	**25**	**60**	**25**
Impact Driving	Single Strike SEL_{ss} ($L_{E,p,\ single\ strike}$) specified at "x" meters (Cell B32)	170	160	160	170	170	NA	NA
	Number of strikes per pile	500	1800	1800	1800	1800	NA	NA
	Number of piles per day	6	6	6	2	2	NA	NA
	Transmission loss coefficient	15	15	15	15	15	NA	NA
	Distance of single strike SEL_{ss} ($L_{E,p,\ single\ strike}$) measurement (meters)	10	10	10	10	10	NA	NA
	$L_{p,0\text{-}pk}$ specified at "x" meters (Cell G29)	180	180	180	195	195	NA	NA
	Distance of $L_{p,0\text{-}pk}$ measurement (meters)$^{+}$	10	10	10	10	10	NA	NA
	Phocid	**249.9**	**126.5**	**126.5**	**282.2**	**282.2**	NA	NA
	Otariid	**93.2**	**47.1**	**47.1**	**105.2**	**105.2**	NA	NA
	MONITORED	**260**	**130**	**130**	**290**	**290**	NA	NA
	Sound Pressure Level (L_{rms}), specified at "x" meters (Cell B53)	182	170	170	180	180	NA	NA
	Number of piles per day	6	6	6	2	2	NA	NA
	Strike (pulse) Duration$^{\Delta}$ (seconds)	0.01	0.01	0.01	0.01	0.01	NA	NA
	Number of strikes per pile	500	1800	1800	1800	1800	NA	NA
	Duration of Sound Production (seconds)	30	108	108	36	36	NA	NA
	10 Log (duration of sound production)	14.77	20.33	20.33	15.56	15.56	NA	NA
	Transmission loss coefficient	15	15	15	15	15	NA	NA
	Distance of sound pressure level (L_{rms}) measurement (meters)	10	10	10	10	10	NA	NA
	$L_{p,0\text{-}pk}$ specified at "x" meters (Cell G29)	180	180	180	195	195	NA	NA
	Distance of $L_{p,0\text{-}pk}$ measurement (meters)$^{+}$	10	10	10	10	10	NA	NA
	Phocid	**73.2**	**27.2**	**27.2**	**60.8**	**60.8**	NA	NA
	Otariid	**27.3**	**10.2**	**10.2**	**22.7**	**22.7**	NA	NA

TABLE 7- CALCULATED DISTANCES AND AREAS TO THE ESTIMATED LEVEL A (BASED ON NMFS' 2018 TECHNICAL GUIDANCE AND NMFS' PROPOSED 2024 UPDATE TO THE 2018 TECHNICAL GUIDANCE) AND LEVEL B HARASSMENT THRESHOLDS BY PILE TYPE AND PILE DRIVING METHOD FOR THE INITIAL AND PROPOSED IHAS

Activity	Pile description	Authorization period	Piles Per day	Level A harassment distances (m) (2018 Technical Guidance/2024 Proposed Update to the 2018 Technical Guidance) [1]		Level A harassment areas (km^2) for all hearing groups [2]	Level B harassment Distance (m) all hearing groups [3]	Level B harassment areas (km^2) for all Hearing groups [2]
				PW	OW			
Vibratory Installation/ Removal	16-inch Timber Piles	Initial IHA	~~3~~2	4.8	0.3	<0.1	~~6,310~~ 790	<0.3
		Proposed IHA ...	12	16.0/45.7	1.1/15.4	<0.1	~~6,310~~ 790	<0.3
		Revised IHA	12	17.3/22.0	5.8/7.4	<0.1	790	<0.3
	16-inch Plastic Piles	Initial IHA	NA	NA	NA	NA	NA	NA
		Proposed IHA ...	NA	NA	NA	NA	NA	NA
		Revised IHA	12	13.8/13.8	4.7/4.7	<0.1	790	<0.3
	14-inch Steel H Beam	Initial IHA	2	0.5	0	<0.1	631	<0.3
		Proposed IHA ...	6	1.0/2.9	0.1/1.0	<0.1	631	<0.3
		Revised IHA.....	6	1.0/2.9	0.1/1.0	<0.1	631	<0.3
	24-inch Steel Sheet	Initial IHA	3	3.4	0.2	<0.1	~~4,379~~ 790	<0.3
		Proposed IHA ...	30	3.4	0.2	<0.1	~~4,379~~ 790	<0.3
		Revised IHA.....	30	20.1/20.1	6.8/6.8	<0.1	790	<0.3
Impact Installation	16-inch Timber Piles	Initial IHA	3	36.8	2.7	<0.1	47	<0.1
		Proposed IHA ...	6	76.5/126.5	5.6/47.1	<0.1	47	<0.1
		Revised IHA.....	6	27.2/223	10.2/230	<0.1	47	<0.1
	16-inch Plastic Piles	Initial IHA	NA	NA	NA	NA	NA	NA
		Proposed IHA ...	NA	NA	NA	NA	NA	NA
		Revised IHA.....	6	249.9/223	93.0/230	<0.1	790	<0.3
	14-inch Steel H Beam	Initial IHA	2	170.6	12.4	<0.1	216	<0.1
		Proposed IHA ...	2	170.6/282.2	12.4/105.2	<0.1	216	<0.1
		Revised IHA.....	2	282/223	105/230	<0.1	790	<0.3

[1]The initial IHA only calculated distances to the Level A harassment thresholds based on the 2018 Technical Guidance, whereas the proposed and revised IHA considers calculated distances to the Level A harassment thresholds based on both the 2018 Technical Guidance and the 2024 Proposed Update to the 2018 Technical Guidance.

[2] Harassment areas have been truncated where appropriate to account for land masses.

[3] The maximum harassment distances are approximately 790 m for Wharf 4 South, 795 m for Wharf 4 East, and 655 m for Wharf D due to the presence of land masses in the project area, which truncate sound transmission.

TABLE 9—PROPOSED SHUTDOWN ZONES DURING IN-WATER PILE DRIVING ACTIVITIES FOR THE INITIAL AND PROPOSED IHAS

Activity	Pile description	Authorization period	Distance (m) 1	
			PW	OW
Vibratory Installation/ Removal	16-inch Timber/Plastic Piles	Initial IHA	15	15
		Proposed IHA	20/50	≤20/50
		Revised IHA	25	25
	14-inch Steel H Beam	Initial IHA	15	15
		Proposed IHA	20/20	20/20
		Revised IHA	25	25
	24-inch Steel Sheet	Initial IHA	15	15
		Proposed IHA	30/60	30/60
		Revised IHA	25	25
Impact Installation	16-inch Timber Piles	Initial IHA	40	40
		Proposed IHA....	130	130
		Revised IHA	130	130
	16-inch Plastic Piles	Initial IHA.....	NA	NA
		Proposed IHA.....	NA	NA
		Revised IHA	260	260
	14-inch Steel H Beam	Initial IHA	175	175
		Proposed IHA	290	290
		Revised IHA	290	290