

**Project name: EM&A for Permanent Aviation Fuel Facility (PAFF)**

**Activity: Dolphin Impact Monitoring**

\*Remark: Record the number of dolphin occurrences within the 500m exclusion zone  
 (A) prior to/ outside dredging times and (B) during dredging OR (C) outside the exculsion zone

Week	Date	Derrick Lighters #38		Derrick Lighters #83		Grab dredger		Observer's Name		
		No. of Dolphin Occurrence*	Sighting Sheet No.	No. of Dolphin Occurrence*	Sighting Sheet No.	No. of Dolphin Occurrence*	Sighting Sheet No.			
1	Fri	13-Nov	0	-	Not in operation		Not in operation		Alvin Lee	
	Sat	14-Nov	0	-	0	0	Not in operation		Richard Huang	
	Sun	15-Nov	0	-	0	0	Not in operation		Richard Huang	
2	Mon	16-Nov	0	-	2 (C)	1-2	Not in operation		Alvin Lee	
	Tue	17-Nov	0	-	Not in operation		0	-	Richard Huang	
	Wed	18-Nov	0	0	Not in operation		Not in operation		Francesca Zino	
	Thu	19-Nov	1 (C)	4	Not in operation		0	-	Richard Huang	
	Fri	20-Nov	0	-	Not in operation		0	-	Alvin Lee	
	Sat	21-Nov	0	-	Not in operation		0	-	Richard Huang	
	Sun	22-Nov	0	-	Not in operation		0	-	Alvin Lee	
	Mon	23-Nov	Not in operation		Not in operation		0	-	Alvin Lee	
	Tue	24-Nov	0	-	Not in operation		0	-	Richard Huang	
	Wed	25-Nov	1 (C)	5	Not in operation		0	-	Alvin Lee	
3	Thu	26-Nov	0	-	Not in operation		0	-	Anson Chow	
	Fri	27-Nov	0	-	Not in operation		0	-	Alvin Lee	
	Sat	28-Nov	0	-	Not in operation		0	-	Richard Huang	
	Sun	29-Nov	0	-	Not in operation		0	-	Alvin Lee	
	Mon	30-Nov	0	-	Not in operation		0	-	Anson Chow	
	Tue	1-Dec	Not in operation		Not in operation		Not in operation [1 (A)] <sup>†</sup>		5	Richard Huang
	Wed	2-Dec	Not in operation		Not in operation		1 (A)	6	Anson Chow	
4	Thu	3-Dec	Not in operation		Not in operation		0	-	Richard Huang	
	Fri	4-Dec	Not in operation		Not in operation		0	-	Anson Chow	
	Sat	5-Dec	Not in operation		Not in operation		0	-	Richard Huang	
	Sun	6-Dec	Not in operation		Not in operation		1 (A)	7	Alvin Lee	
5	Mon	7-Dec	Not in operation		Not in operation		0	-	Anson Chow	
	Tue	8-Dec	Not in operation		Not in operation		0	-	Richard Huang	
	Wed	9-Dec	Not in operation		Not in operation		0	-	Anson Chow	
	Thu	10-Dec	Not in operation		Not in operation		1 (B)	8	Anson Chow	
	Fri	11-Dec	Not in operation		Not in operation		0	-	Anson Chow	

<sup>†</sup> Dolphin monitoring was conducted, despite the Grab Dredger not operating that day

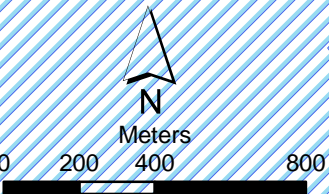
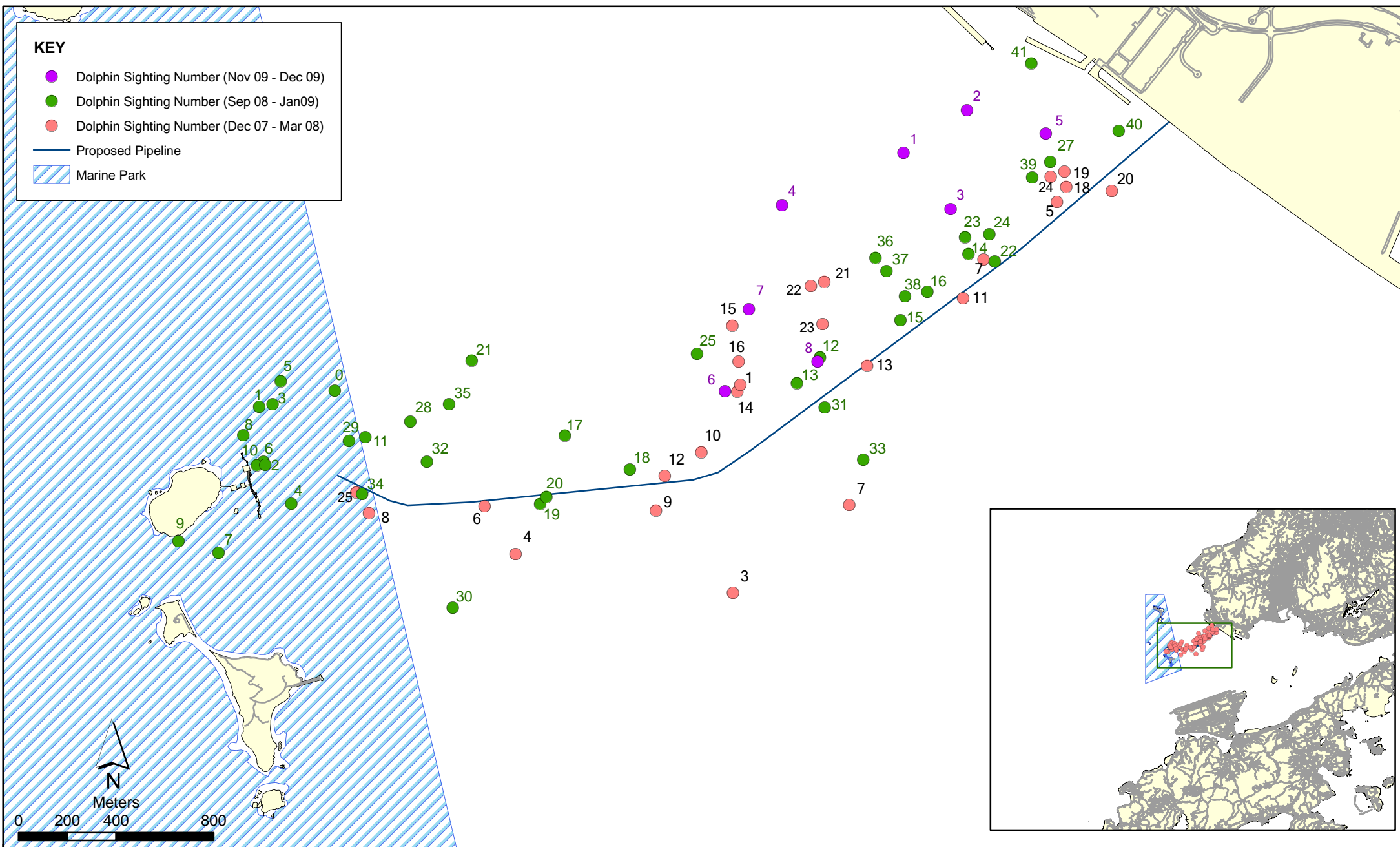
Data included in the 37th Monthly Report

Permanent Aviation Fuel Facility (PAFF) - Dolphin Sighting Records

Sighting No.	Date	Time	Dredger Coordinates (N-Lat)	Dredger Coordinates (E-Long)	Sighting Distance (m)	#Sighting Angle from Dredging Machine (o)	Group size	Group Composition*	Beaufort	Boat Association	Behaviour	Other comments
1	16-Nov-09	0848	825063.045	810003.667	640	278	2	Undetermined	3	None	Undetermined	Sighting at 600m during dredging
2	16-Nov-09	0939	825223.562	810220.771	600	280	1	Undetermined	3	None	Undetermined	Sighting at 640m during dredging
3	19-Nov-09	1017	825098.716	810051.912	520	250	2	1SJ, 1UA	2	None	Travelling	One sighting at 520m during dredging
4	25-Nov-09	0849	825104.661	810059.953	>1200	262	2	Undetermined	2	Shrimp	Feeding	One sighting at >1.2km from vessel during dredging
5	1-Dec-09	0820	825104.641	810060.293	166	320	1	Undetermined	2	None	Jumping	One sighting at 166m. After 20 minutes, at 560m, not during dredging. <b>NB</b> Dredger not in operation for the whole day
6	2-Dec-09	1250	824212.831	808854.207	220	260	2	Undetermined	2	None	Socializing	Sighting at 220m; after 5 minutes, at 250m. Sited during lunch break when dredger had temporarily stopped operations
7	6-Dec-09	0832	824272.284	808934.619	310	320	2	1SS, 1US	2	None	Diving	Sighting at 310m moving west and leaving exclusion zone at 0838, during pre-dredging check
8	10-Dec-09	1645	824303.921	808968.362	50	100	1	Undetermined	2	None	Spy-hopping	Sighting at 50m during dredging
*Key:			# Compass bearing is used (North = 0 degree )									
UC = Unspotted Calf												
UJ = Unspotted Juvenile												
SJ = Spotted Juvenile												
SS = Spotted Sub-adult												
SA = Spotted Adult												
UA = Unspotted Adult												
Data included in the 37th Monthly Report												

**KEY**

- Dolphin Sighting Number (Nov 09 - Dec 09)
- Dolphin Sighting Number (Sep 08 - Jan 09)
- Dolphin Sighting Number (Dec 07 - Mar 08)
- Proposed Pipeline
- ▨ Marine Park



Dolphin Sighting Locations (as of 31 December 2009)