



# **TECHNICAL CHARACTERISTICS OF THE PORT**

### **2.1 General Conditions**

### 2.1.1 Location

Location	
Longitude	6° 49' 32.8" W (Greenwich)
Latitude	37°8'6,6" N

### 2.1.2 Wind system

Wind system	
Prevailing	NW
Predominant	SW

### 2.1.3 Storm system

Storm system	
Significant maximum wave height (Hs MAX)	4.42
Peak wave period (Tp) linked to Hs MAX	12.11
Mean wave direction (Dir) linked to Hs MAX	208

### 2.1.4 Level of the sea

Level of the sea		
Maximum tidal range recorded during the year *	3.6	
Minimum low tide recorded during the year with respect to port zero $^{\star}$	0.18	
Minimum low tide recorded during the year compared to port zero *	4.00	

\* Data from the latest recorded year, 2022

#### 2.1.5 Entrance

#### 2.1.5.1 Entry channel

Entry channel	
Orientation	339°
Width	200 to 300 m
Length	22,000 m
Water depth at M.L.W.S	13 m*
Nature of the seabed	Sand and sludge

\* The project draft is updated with the bathymetries that are being carried out in the port.

#### 2.1.5.2 Entry access

Entry access	
Orientation	339°
Width	300 m
Draught at M.L.W.S	13 m*
Maximum recorded current	5 knots

\* Draft of the project.

#### 2.1.5.3 Use of tugs for entry and exit

In accordance with the current Rules for Entry, Exit, Docking and Undocking at the Port of Huelva, published in the Official Gazette of the Province of Huelva No. 201 on October 23, 2006, the mandatory use of tugs in normal conditions is dependent on the length of the vessel and the nature of the freight, rather than the value of its GT.

Thus, the attendance of tugs will be mandatory when it comes to manoeuvring vessels of more than 90 m in length, carrying hazardous freight classified under classes 1, 2, 3 or 4 of the IMDG Code, those included in Article 15 of Royal Decree 145/89, approving the National Regulations for the Admission, Handling and Storage of Hazardous Freight in Ports, and substances not included in the sections above, which are considered hydrocarbons as defined in Article 1.2 of Royal Decree 253/2004, of February 13, establishing measures to prevent and combat pollution in the loading, unloading and handling of hydrocarbons in the maritime and port environment.

#### 2.1.5.4 Largest vessels to have entered in the last year

Features	Greatest	Greatest length		draught
reatures	Area 1	Area 2	Area 1	Area 2
Name	LNG LAGOS II	EVER GLOBE	JY RIVER	NORDIC SPACE
Nationality	BERMUDAS	PANAMA	LIBERIA	<b>CAYMAN ISLANDS</b>
Gross tonnage (G.T.)	115,995	219,775	43,968	81,721
Dead weight tonnage (D.W.T.)	99025	198937	81161	157587
Length	299.5	399.98	229	277
Draught	12.97	16	14.45	17.17
Туре	Transport of liquefied gas	Container Ship	Bulk Carrier	Oil Tanker
Real entry or exit draught	11.8	15.2	13.15	16.1

### 2.1.6 Flotation surface area (Ha)

#### 2.1.6.1 Area I

Location	Location Outer harbour		Docks			
Location		Commercial	Fishing	Others	Total	
Entry channel	366.70				366.70	
Outer dock		379.90			379.90	
Inner dock		239.50	16.50	5.20	261.20	
Others				1,084.31	1,084.31	
Total Area I	366.70	619.40	16.50	1,089.51	2,092.11	

#### 2.1.6.2 Area II

Location	Access	Anchorage area	Others	Total
Crude oil terminal buoy			113.00	113,00
Others		2,639.00	9,994.30	12,633.30
Total Area II		2,639.00	10,107.30	12,746.30

### 2.2 Facilities at the service of maritime trade

### 2.2.1 Quays and berths

#### 2.2.1.1 Classification by docks

Service	Length (m)	Draught (m)	Width(m)	Used for
For Service				
Ingeniero Juan Gonzalo Quay	942	13.00	230	General freight and bulk materials
Ciudad de Palos Quay	492	13.00	320	General freight and bulk materials
Levante South Quay	400	8.00	80	General freight and passengers
Levante Centre Quay	90	8.00	80	Local passengers and auxiliary
Levante North Quay	710	8.00	80	Fishing and inner traffic
Arenillas Tower Oil Tanker Quay	460	12.60		Bulk liquid (2 berths)
Ore Quay	374	13.00	50	General freight and bulk materials
South Quay	750	13.00	300	Passengers, general freight, RO-RO and containers
Tharsis Quay	280	-	-	Out of service
Mooring buoys - North	200	7.00	-	
Mooring buoys - Centre	200	6.00	_	
Mooring buoys - South	150	5.00	-	
TOTAL FOR SERVICE	5,048			

Service	Length (m)	Draught (m)	Width(m)	Used for
Private				
New Huelva Shipyard Quay	337.0	-	-	Weapons, repairs and scrap
Riotinto quay	390.0	-	-	Out of service
Fertiberia, S.L. (Phosphoric acid/compounds) jetty	180.0	8.10	-	Bulk liquid
Atlantic Copper, S.L.U. jetty North	140.0	6.50	-	Bulk liquids
Fertiberia, S.L. (Fertiliser) jetty	150.0	8.10	-	Bulk liquids and solids
Impala Terminal	550.0	14.00	-	Bulk solids
Levantino-Aragonesa de Tránsitos, S.A.	120.0	9.70	-	Bulk liquids
Atlantic Copper, S.L.U TNP 1 jetty	175.0	10.00	-	Bulk liquids
Atlantic Copper, S.L.U. jetty TNP 2	159.0	8.00	-	Bulk liquids
Saltés quay	200.0	5.50	-	Weapons, repairs and scrap
Reina Sofía E de CEPSA jetty	190.0	10.00	-	Bulk liquids
Reina Sofía C de CEPSA jetty	128.0	8.50	-	Bulk liquids
Reina Sofía W de CEPSA jetty	150.0	9.00	-	Bulk liquids
Reina Sofía 4º CEPSA BERTH jetty	210.0	12.60	-	Bulk liquids
Enagas, S.A. jetty	304.5	12.00	-	Bulk liquids
Decal North jetty	210.0	11.50	-	Bulk liquids
Decal South jetty	210.0	12.50	-	Bulk liquids
Decal-South 2 jetty	188.0	13.30	-	Bulk liquids
Royal Maritime Club of Huelva	16.0	2.00	-	Various

Service	Length (m)	Draught (m)	Width(m)	Used for
La Rábida quay	20.0	2.00	-	Auxiliary (1 berth)
Single buoy	275.0	16.50	-	Bulk liquids
TOTAL FOR INDIVIDUALS	4,302.5			
TOTAL	9,350.5			

#### 2.2.1.2 Classification by uses and draught

llesses		Linear metres with draught "C" (m)					
Usage	C ≥ 12	12 > C ≥ 10	10 > C ≥ 8	8 > C ≥ 6	6 > C ≥ 4	Total	C<4
Service							
Commercial docks							
General conventional freight		-	-		-	-	-
Containers	-		-	-	-	-	-
RO-RO berths	-		-	-	-	-	-
Bulk solids without special installation	-	-	-	-	-	-	-
Bulk solids via special installation	-	-	-	-	-	-	-
Bulk liquids	460	-	-	-	-	460	-
Multi-purpose	2,558	-	-	400	-	2,958	-
Passengers	-	-	-	90	-	90	-
Other quays							
Fishing	-	-	-	710	-	710	-
Weapons, repairs and scrap	-	-	-	-	-	-	-

llesse		Linear metres with draught "C" (m)						
Usage	C ≥ 12	12 > C ≥ 10	10 > C ≥ 8	8 > C ≥ 6	6 > C ≥ 4	Total	C<4	
Service buoys				400	150	550		
Various	-	-	-	-	280	280	-	
TOTAL FOR SERVICE	3,018	-	-	1,600	430	5,048	-	
Private								
Commercial docks								
General conventional freight	-	-	-	-	-	-	-	
Containers	-	-	-	-	-	-	-	
RO-RO berths	-	-	-	-	-	-	-	
Bulk solids without special installation	-	-	-	-	-	-	-	
Bulk solids via special installation	550	-	150		-	700	-	
Bulk liquids	1,119	575	737	140	-	2,571	-	
Multi-purpose	-	-	-	-	-	-	-	
Passengers	-	-	-	-	-	-	-	
Other quays						-		
Fishing	-	-	-	-	-	-	-	
Weapons, repairs and scrap	-	-	-	-	337	337	-	
Various	-	-	-	-	590	590	28	
TOTAL FOR PRIVATE	1,669	575	887	140	927	4,198	28	
TOTAL FOR SERVICE AND PRIVATE	4,687	575	887	1,740	1,357	9,246	28	

### 2.2.2 Land and storage areas (m<sup>2</sup>)

Dock	Designation		Warehouses			Others	Total
DOCK		Uncovered	Covered and open	Closed	Roads	Others	iotai
	North Fishing Industrial Estate				53,878	217,656	271,534
	Concessions					131,323	
	Others					86,332	
	Communications and services				53,878		
Levante	Levante quay and surroundings	29,690		2,760	74,240	172,560	279,250
Warehouse 1				1,560			
Warehouse 2				1,200			
Storage Area		29,690					
	Concessions					29,596	
	Others					142,965	
	Communications and services				74,240		
	Cross streets and Punta del Sebo				675,294	2,481,476	3,156,769
	Concessions					1,348,458	
	Others					1,133,017	
	Communications and services				675,294		
	Outer Port	669,063		235,519	366,265	2,761,218	4,032,065
Muelle de Minerales							
Storage Area		11,846					
Ciudad de Palos							
Storage Area		109,459					

Dock	Designation		Warehouses		Roads	Others	Total
DUCK		Uncovered	Covered and open	Closed	Rodus	others	Total
Ing. Juan Gonzalo				16,720			
Warehouse 1				3,600			
Warehouse 2				4,760			
Warehouse 3				3,600			
Warehouse 4				4,760			
Storage Area		183,830					
Atlantic Copper, S.L.U.(C-1187 and C-1348)				14,895			
Bergé Marítima, S.L. (C- 1409)		17,570		17,570			
ImpalaTerminals Huelva, S.L.U. (C-1309)		101,913		48,143			
South Quay							
Storage area		170,773					
Yilport Huelva, S.L.		54,697.6					
	Outer port (outside the docks)						
	Algeposa Huelva, S.L. (C-1151)			55,623			
	Servimad (C-968)			10,947			
	Bergé Marítima, S.L.(C-1144 y C-1045)			28,667			
	García-Munté Energía, S.L. (C-1750)	32,948					
	Congrasur (C-1048)			7,155			

Dock	Designation		Warehouses			Others	Total
DUCK	Designation	Uncovered	Covered and open	Closed	Roads	Others	Total
	Bergé Marítima, S.L.( C-1210)			9,451			
	Aridos Anfersa, S.L.( C-1501)			9,627			
	Congrasur (A01631)	9,035					
	García-Munté Energía S.L. (A01600)	15,000					
	Bergé Marítima, S.L. (A-1754)	9,289					
	Servimad (A-1768)	5,000					
	Subproductos y Minerales, S.A. (A-1730)	2,400					
	Concessions					1,331,622	
	Others					1,429,596	
	Communications and services				366,265		
	Marismas del Odiel				224,316	5,801,597	6,025,913
	Concessions					203,196	
	Others					5,598,400	
	Communications and services				224,316		
	Marismas del Tinto				501,937	3,554,087	4,056,024
	Concessions					116,111	
	Others					3,437,975	
	Communications and services				501,937		
		698,753		238,279	1,895,929	14,988,593	17,821,554

### 2.2.3 Cold stores and ice factories

Location	Description	Owner	Storage capacity (m <sup>3</sup> )	Comments
Joaquín Turina Street, 1 (Fco. Montenegro Avenue)	Refrigerated warehouse	Alquileres Raiseber, S.L.	9,000	Storage from -18° to -20°. Various
Pesquero Norte Industrial Estate	Refrigerated warehouse	Expromar, S.A.	2,400	Storage: -18°. Various
Pesquero Norte Industrial Estate	Ice factory	Hielos Costa de la Luz	750	In operation
Pesquero Norte Industrial Estate	Refrigerated warehouse	Baltimar		
South Quay	Refrigerated warehouse	Yilport	256 plugs	These plugs are for the reefer

### 2.2.4 Maritime terminals

Location	Owner	Traffic	Surface area (m²)
South Quay	Balearia Eurolíneas Marítimas, S.A.	Huelva - Canary Islands	86.00
South Quay	Naviera Armas, S.A.	Huelva - Canary Islands	90.00

### 2.2.5 Fishing installations

Type of installation	Location	Surface area m <sup>2</sup>
Fish market	Levante Quay	2,280.92
Warehouse	Pesquero Norte Industrial Estate	1,620
Fishers, shipowner's warehouses or sheds	Pesquero Norte Industrial Estate	4,860
Fish preparation and packaging warehouse	Pesquero Norte Industrial Estate	20,314.00

### 2.2.6 Buildings and installations for public use

Location	Owner	Use	Characteristics
Levante North Quay	A.P.H.	Fish Auction Logistic Hub	$2,000 \text{ m}^2 \text{ on } 1^{\text{st}} \text{ floor}$
Real Sociedad Colombina Onubense Avenue	A.P.H.	A.P.H. Main office	2,460 m <sup>2</sup> on 3 floors
			100 KVA housing
Hispanoamérica Avenue	A.P.H.	Transformer Centre (Lighting and Housing)	125 KVA lighting
Hispanoamérica Avenue	A.P.H.	Parking facilities	413.96 m <sup>2</sup> with 142 parking spots
Hispanoamérica Avenue and Sanlúcar de Barrameda Street	A.P.H.	A.P.H. offices, Harbourmaster's Office, Port Services Control Centre, SASEMAR, The Port of Huelva Stevedoring Society, Civil Guard, Health Control at Borders	2,689.26 m <sup>2</sup> on 3 floors (3 buildings)
Levante Quay	A.P.H.	Puerto del Príncipe parking facilities	576 m <sup>2</sup> with 197 parking spots
Levante Quay	A.P.H.	N°2 Transformer Centre North	630 KVA
Levante Quay	A.P.H.	Huelvaport	16.70 m <sup>2</sup>
Levante Quay	A.P.H.	Commercial Department Office	223.30 m <sup>2</sup>
Levante Quay	A.P.H.	Office of the Storage, Facilities and Ground Operations Division	240 m <sup>2</sup> on 2 floors
Levante Quay	A.P.H.	Customs Unit	72 m <sup>2</sup> on 1 floor
Levante Quay	A.P.H.	Guardia Civil Control Post	11.95 m <sup>2</sup>
Levante Quay	A.P.H.	Guardia Civil Control Post Parking facilities	427.03 m <sup>2</sup> with 146 parking spots
Levante Quay	A.P.H.	Premises (3) of the maritime service of the State Tax Administration Agency	48.8 m <sup>2</sup>
Levante Quay	A.P.H.	Premises (4) of the General Directorate of the Civil Guard	65.07 m <sup>2</sup>
Levante Quay	A.P.H.	Transformer Centre n°1 South	630 KVA
Hispanoamérica Avenue	A.P.H.	Port parking facilities	665 on 1 floor

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Location	Owner	Use	Characteristics
Hispanoamérica Avenue	A.P.H.	Port of Huelva Reception and Documentation Centre	875 m <sup>2</sup> on 1 floor
Fco. Montenegro Avenue	A.P.H.	La Ría Promenade Parking facilities	732.78 m <sup>2</sup> perpendicular with 251 parking spots 466.68 m <sup>2</sup> with 90 parallel spots
Fco. Montenegro Avenue	A.P.H.	La Ría Promenade	81,525 m² promenade
Fco. Montenegro Avenue	A.P.H.	Paseo de la Ría bathrooms	134,20 m <sup>2</sup> 10 plant modules (13,42 m <sup>2</sup> )
Fco. Montenegro Avenue	A.P.H.	Parking facilities	75.49 m <sup>2</sup> with 26 parking spots
Fco. Montenegro Avenue	A.P.H.	Parking facilities Fertiberia	425.06 m <sup>2</sup> with 146 parking spots
Fco. Montenegro Avenue	A.P.H.	Real Club Marítimo parking facilities	196.62 m <sup>2</sup> with 67 perpendicular parking spots and 70.21 m <sup>2</sup> with 14 parallel parking spots
Fco. Montenegro Avenue	A.P.H.	Colón Parking facilities	105.12 m <sup>2</sup> with 36 parking spots
Fco. Montenegro Avenue	A.P.H.	Térmica Parking facilities	78.06 m <sup>2</sup>
Oil Tanker Quay	A.P.H.	Civil Guard Control Post	6.63 m <sup>2</sup>
Oil Tanker Quay	A.P.H.	Transformer Centre	100 KVA
Oil Tanker Quay	A.P.H.	Parking facilities	122.14 m <sup>2</sup> with 42 perpendicular parking spots and 28 for trucks
Arenillas Tower	A.P.H.	Central Control Tower	800 m <sup>2</sup> on 4 floors
A 111 T		<b>T</b>	1,500 m <sup>2</sup> for storage
Arenillas Tower	A.P.H.	Treatment plant	555 m² warehouse
			n° 5 630 KVA strength
Ciudad de Palos Quay	A.P.H.	Transformer Centre n°5 y n°6	n° 5 250 KVA lightning
			n° 6 630 KVA
Minerales Quay A.P.H. Transformer Centre		Transformer Contra	160 KVA lightning
		Transformer Centre	800 KVA strength
Isla Saltés Quay	A.P.H.	Transformer Centre	100 KVA

Location	Owner	Use	Characteristics
Ingeniero Juan Gonzalo Quay	A.P.H.	Parking facilities	516.56 m <sup>2</sup> with 129 parking spots
Ingeniero Juan Gonzalo Quay	A.P.H.	Transformer Centre Workshops	315 KVA
Ingeniero Juan Gonzalo Quay	A.P.H.	Transformer Centre nº1	630 KVA
			630 KVA strength
Ingeniero Juan Gonzalo Quay	A.P.H.	Transformer Centre n°2	250 KVA lighting
Ingeniero Juan Gonzalo Quay	A.P.H.	Transformer Centre n°3	630 KVA
Ingeniero Juan Gonzalo Quay	A.P.H.	Transformer Centre n°4	630 KVA
Ingeniero Juan Gonzalo Quay	A.P.H.	Civil Guard Control Post	11.95 m <sup>2</sup>
South Quay	A.P.H.	Transformer Centre Terminal Ferroviaria	400 KVA
South Quay	A.P.H.	Transformer Centre n°1	630 KVA
South Quay	A.P.H.	Lighting Transformer Centre-PIF	630 KVA
South Quay	A.P.H.	New access control, Portuary Police, Civil Guard	$64.64m^2$ for two modules of 32,32 $m^2$ of 1 floor
South Quay	A.P.H.	Bathrooms and vending machines	$80.67m^2$ on 1 floor. Corbel of $94.07m^2$
South Quay	A.P.H.	Customs	73.65 m <sup>2</sup> on 1 floor
South Quay	A.P.H.	National Police cabins	22.68 $m^2$ 2 cabins of 6.30 $m^2$ and one cabin of 10.08 $m^2$
South Quay	A.P.H.	Customs (PIF)	180.40 m <sup>2</sup> on 1 floor
South Quay	A.P.H.	Phytosanitary Control (PIF)	1776.82 m <sup>2</sup>
South Quay	A.P.H.	Warehouse means to combat marine pollution	540.30 m <sup>2</sup>
South Quay	A.P.H.	Multifunctional Building (passenger terminal, port services and police and customs control and inspection services)	2392.35 $m^2$ on 3 floors
Mazagón	A.P.H.	Civic building (Casa Vigia - Observation house)	240 m <sup>2</sup> on 2 floors

### 2.2.7 Moles

Description	Lenght(m)	Characteristics
Juan Carlos I, King of Spain mole	13,000	Flow-over type, made of quarry stone, layers of rockfill with edges up to 9 tonnes and parallelepiped concrete blocks up to 4.5 m <sup>3</sup>

### 2.2.8 Schematic plan of lighthouses and beacons

See General Plan of the Port of Huelva.

### 2.2.9 Relationship of lighthouses and beacons

Number	Name and location	Description	Colour	Rythm	Range in miles
8730	River Odiel, Cardinal direction: west	Castillete	В	9 Ct	5
8740	River Odiel n.º 1	Triangular marker	V	D	4
8750	River Odiel n.º 2	Cylindrical marker	R	D	4
8760	River Odiel n.º 3	Triangular marker	V	Gp. D (2)	3
8770	River Odiel n.º 4	Cylindrical marker	R	Gp. D (2)	3
8780	River Odiel n.º 5	Triangular marker	V	Gp. D (3)	3
8790	River Odiel n.º 6	Cylindrical marker	R	Gp. D (3)	3
8800	River Odiel Fork No. 7	Triangular marker	V	Gp. D 2+1	3
8810	River Odiel n.º 8	Cylindrical marker	R	Gp. D (4)	4
8722	Day/night leading lights	Cylindrical/conical tower	VBR	Sectorial	D 5,9 / N 8

Number	Name and location	Description	Colour	Rythm	Range in miles
8820	River Odiel n.º 9	Triangular marker	V	D	3
8830	River Odiel n.º 10	Cylindrical marker	R	D	3
8840	River Odiel n.º 11	Triangular marker	V	Gp. D (2)	3
8850	River Odiel n.º 12	Cylindrical marker	R	Gp. D (2)	3
8855	Vigia submerged breakwater	Castillete	В	Gp.D (2)	3
8870	River Odiel n.º 13	Triangular marker	V	Gp. D (3)	3
8880	River Odiel n.º 14	Cylindrical marker	R	Gp. D (3)	3
8890	River Odiel n.º 15	Triangular marker	V	1 D	3
8900	River Odiel n.º 16	Cylindrical marker	R	Gp. D (4)	3
8905.2	South Mooring Buoy - South port-side	Special marker	А	1 D	1
8905.4	South Mooring Buoy - South starboard-side	Special marker	А	1 D	1
8905.6	South Mooring Buoy - North port-side	Special marker	А	1 D	1
8905.8	South Mooring Buoy - North starboard-side	Special marker	А	1 D	1
9810.1	River Odiel n.º 18	Cylindrical marker	R	1 D	3
8911.2	Centre Mooring Buoy - South port-side	Special marker	А	Gp. D (4)	1
8911.3	Centre Mooring Buoy - South starboard-side	Special marker	А	Gp. D (4)	1
8911.4	Centre Mooring Buoy - North port-side	Special marker	А	Gp. D (4)	1
8911.5	Centre Mooring Buoy - North starboard-side	Special marker	А	Gp. D (4)	1
8925.2	North Mooring Buoy - South port-side	Special marker	А	Gp. D (5)	1
8925.4	North Mooring Buoy - South starboard-side	Special marker	А	Gp. D (5)	1
8925.6	North Mooring Buoy - North port-side	Special marker	А	Gp. D (5)	1
8925.8	North Mooring Buoy - North starboard-side	Special marker	А	Gp. D (5)	1

Number	Name and location	Description	Colour	Rythm	Range in miles
8940	River Odiel n.º 20	Cylindrical marker	R	Gp D (2)	3
8975	River Odiel n.º 22	Cylindrical marker	R	Gp. D (3)	3
*8945	River Odiel n.º 20 M1	Special marker	А	1 D	1
*8950	River Odiel n.º 20 M2	Special marker	А	1 D	1
9010	River Odiel n.º 24	Cylindrical marker	R	4 D	3
9005	River Odiel n.º 26	Cylindrical marker	R	3 D	3
9070	River Odiel n.º 28	Cylindrical marker	R	4 D	3
***9040.2	South buoy	Special marker	А	1 D	1
***9040.3	North-east buoy	Special marker	А	1 D	1
***9040.4	North-west buoy	Special marker	А	1 D	1
9060	Puente del Burro Fork No. 34	Cylindrical marker	R	Gp D (2+1)	3
8700	Picacho lighthouse	Octagonal tower	В	Gp. D (2+4)	25
8710	Morro dike lighthouse	Cylindrical tower	ВуR	Gp. D (3+1)	10
8570	El Rompido lighthouse	Cylindrical tower	В	Gp. D (2)	24
9175	Matalascañas lighthouse (Higuera)	Triangular tower	В	Gp. D (3)	20
8670	Crude oil unloading buoy	Special marker	А	Gp. D (4)	8
8680	Buoy 1 oil pipeline	Special marker	А	Gp. D (4)	5
8685	Buoy 2 oil pipeline	Special marker	А	Gp. D (4)	5
8690	Buoy 3 oil pipeline	Special marker	А	Gp. D (4)	5
8692	Buoy 4 oil pipeline	Special marker	А	Gp. D (4)	5
8694	Buoy 5 oil pipeline	Special marker	А	Gp. D (4)	5
8860	Casa Vigia (Observation House) Beacon	Post with special marker	А	D	1

Number	Name and location	Description	Colour	Rythm	Range in miles
8886	South Quay Beacon - North	Beacon on a support structure	V	Gp. D (4)	3
8882	South Quay Beacon - Centre	Beacon on a support structure	V	Gp. D (4)	3
8881	South Quay Beacon - South	Beacon on a support structure	V	Gp. D (4)	3
8881,1	Duque Alba South Quay Beacon	Beacon on a support structure	А	D	3
8912	Decal Jetty Beacon	Post with a beacon	V	Gp. D (2)	3
8914	Decal Jetty Beacon	Post with a beacon	V	Gp. D (2)	3
8918	Decal Jetty Beacon - North	Post with a beacon	V	Ct	3
8960	Reina Sofia Jetty Beacon	Post with a beacon	V	Gp. D (3)	3
8963	Reina Sofia Jetty Beacon	Post with a beacon	V	Gp. D (3)	3
8965	Reina Sofia Jetty Beacon	Post with a beacon	V	Gp. D (3)	3
8915	Fenosa Emissary Beacon	Post with a limit marker	А	Ct	1
8970	Enagas Jetty Beacon	Post with a beacon	V	Gp. D (4)	3
8972	Enagas Jetty Beacon	Post with a beacon	V	Gp. D (4)	3
8977	FORET Jetty	Post with a beacon	V	D	3
8977,1	FORET Jetty	Post with a beacon	V	D	3
8980	Atlantic Jetty - South	Post with a beacon	V	Gp. D (2)	3
8981	Atlantic Jetty - Outer	Post with a beacon	V	Gp. D (2)	3
8985	Ercross-Atlantic Copper Jetty	Post with a beacon	V	Gp. D (3)	3
8990	Ercross-Atlantic Copper Jetty	Post with a beacon	V	Gp. D (3)	3
9015	Juan Gonzalo Extension - South	Post with a beacon	V	Gp. D (4)	3
9016	Juan Gonzalo Quay	Beacon	V	1 D	3
9035	Ore Quay	Beacon	V	Gp. D	3

Number	Name and location	Description	Colour	Rythm	Range in miles
9040	Quay for tugs	Post with a beacon	V	Gp. D	3
9045	Oil Tanker Quay	Post with a beacon	V	Gp. D (2)	3
9047	Oil Tanker Quay	Post with a beacon	V	Gp. D (2)	3
9050	Buoy No. 30	Cylindrical marker	R	Gp. (2D)	3
9052	Buoy No. 32	Cylindrical marker	R	Gp. (3D)	3
9054	Buoy No. 17 Fork	Triangular marker	V	Gp. D (2+1)	3
9055	Yacht Club	Beacon	V	4 D	1
9055,1	Yacht Club	Beacon	V	Ct	1
9055,3	Yacht Club	Beacon	V	Gp D (2)	1
9065	Fertiberia - Fertiliser	Post with a beacon	V	D	3
9067	Fertiberia - Fertiliser	Post with a beacon	V	D	3
9075	Buoy No. 36	Cylindrical marker	R	Gp. 1 D	3
9084	Atlantic Copper - North	Post with a beacon	V	Gp. D (2)	3
9086	Atlantic Copper - North	Post with a beacon	V	Gp. D (2)	3
9090	Fertiberia - Phosphoric acid	Post with a beacon	V	Gp. D (3)	3
9095	Fertiberia - Phosphoric acid	Post with a beacon	V	Gp. D (3)	3
9100	Buoy No. 38	Cylindrical marker	R	Gp. 3 D	3
9110	Buoy No. 19	Triangular marker	V	Gp D (4)	3
9120	Tinto Quay	Beacon	V	D	3
9121	Buoy No. 40	Cylindrical marker	R	D	3
9122	Jetty for official launches	Beacon	V	Gp. D (2)	1
9122,5	Jetty for official launches	Beacon	V	Gp. D (2)	1

Number	Name and location	Description	Colour	Rythm	Range in miles
9123,1	Buoy R1	Special marker	А	D	3
9123,2	Buoy R2	Special marker	А	D	3
9125	Levante Centre Quay	Beacon	V	Gp. D (3)	3
9135	Tharsis Quay	Beacon	R	Gp. D (4)	3
9025	Saltés Quay	Beacon	R	D	3
9170	La Rábida Quay	Post with a beacon	V	Ct	1
9155	Tinto Bridge	Beacon	V	Ct	1
9150	Tinto Bridge	Beacon	R	Ct	1
9160	Tinto Bridge	Beacon	R	Ct	1
9145	Tinto Bridge	Beacon	V	Ct	1
8665	Burro Bridge	Beacon	V	Ct	1
8665,1	Burro Bridge	Beacon	R	Ct	1
8665,2	Burro Bridge	Beacon	V	Ct	1
8665,3	Burro Bridge	Beacon	R	Ct	1

\*Delimits the manoeuvring area to turn Enagas vessels around.

\*\*\* Old Ore Quay turn-around area.

### **2.4 Installations for vessels**

### 2.4.1 Docks

## **2.4.1.1 Dry docks** Not applicable.

**2.4.1.2 Floating docks** Not applicable.

**2.4.2 Slipways** Not applicable.

#### 2.4.3 Shipyards

Nuevo Astillero de Huelva, S.A.

### 2.4.4 Vessel supply services

Type of supply	Location	No. of outlets	Hourly capacity for each outlet	Hourly capacity of the quay	Supplier
Liquid fuels	Levante Quay	6	B 15 Diesel	B 90 Diesel	CEPSA Comercial del Petróleo SAU
Lubricant	M/T "Galileo J"	1	7	Lubricating oil	Amadesam
Liquid fuels	Oizmendi	2	600 m <sup>3</sup>	HFO/GO	Itsas Gas Bunker Supply, S.L.
Water	Levante Quay	33	17	51	Amasur, S.A.L.
Water	Oil Tanker Quay	2	17	17	Amasur, S.A.L.
Water	Ore Quay	5	17	34	Amasur, S.A.L.
Water	Ingeniero Juan Gonzalo/Ciudad de Palos Quay	38	17	51	Amasur, S.A.L.
Water	South Quay	14	17		Amasur, S.A.L.

### **2.5 Mechanical land resources**

### 2.5.1 Cranes

#### 2.5.1.1 Dockside Cranes

Location	Owner	N°	Make	Туре	Power	Force	Height above the MLWS	Container throughput/hour	Year
South Quay	Yilport Huelva	1	Paceco	Panamax containers	Electrical	30-40	31	20-22	1984
South Quay	Yilport Huelva	1	Paceco	Post Panamax containers	Electrical	40-50	36	21-24	1990
South Quay	Yilport Huelva	3	Kalmar	Super PostPanamax containers	Electrical	65	38		2004

#### 2.5.1.2 Mobile cranes

Location	Owner	N٥	Make	Туре	Power	Force	Height above the MLWS	Throughput tonnes/hour	Year
Ingeniero Juan Gonzalo Quay/Ciudad de Palos Quay	Bergé	2	Liebherr LHM 400	Mobile	Diesel fuel	52	45	700	2002
Ingeniero Juan Gonzalo Quay/Ciudad de Palos Quay	Algeposa	1	Liebherr LHM 400	Mobile	Diesel fuel	52	45	600	1996
Ingeniero Juan Gonzalo Quay/Ciudad de Palos Quay	Algeposa	1	Liebherr LHM 500	Mobile	Diesel fuel	52	48	700	2004
Ingeniero Juan Gonzalo Quay/Ciudad de Palos Quay	Algeposa	1	Liebherr LHM 600	Mobile	Diesel fuel	74	45	900	2007
Ingeniero Juan Gonzalo Quay/Ciudad de Palos Quay	Servimad	1	Gottwald HMK 330	Mobile	Diesel fuel	80	46,6	970	2001
Ingeniero Juan Gonzalo Quay/Ciudad de Palos Quay	Ership	1	Gottwald HMK 360	Mobile	Diesel fuel	63	47	1.500	2006
Ingeniero Juan Gonzalo Quay/Ciudad de Palos Quay	Ership	1	Gottwald HMK 6507B	Mobile	Diesel fuel	100	50	1.112	2013
Ingeniero Juan Gonzalo Quay/Ciudad de Palos Quay	Ership	1	Gottwald HMK 6407B	Mobile	Diesel fuel	100	50	1.007	2018
Impala Terminal	Bergé	1	Liebherr LHM 550	Mobile	Diesel fuel	300	64	2.300	2015

#### 2.5.1.3 Number of Cranes Summary

Туре	Service	Private	Total
Gantry			
Up to 6 tonnes			
Between 7 and 12 tonnes			
Between 13 and 16 tonnes			
Over 16 tonnes		5	5
Mobile	0	10	10
Total	0	15	15

### 2.5.2 Special loading and unloading installations

Location	Owner	Year of manufacture	Characteristics
Decal España (lighters) jetty	DECAL ESPAÑA, S.A.	2008	Total length L: 84,93 m. Dead weight 5,000 tonnes. Beam B 16,00 m. Max. draught when loaded D 6.00 m. Displacement when loaded P 6,800 tonnes. A docking and loading/unloading platform. Two berthing dolphins. Pedestrian walkways with pipe support. Berthing fenders. Quick release mooring hooks.
Fertiberia, S.L. (Phosphoric acid/compounds) jetty	A.P.H.	1975	Throughput: Loading phosphoric acid: 200 to 250 tonnes/hour. The company currently using this is Fertiberia S.L.
Atlantic Copper, S.L.U. north jetty	ATLANTIC COPPER, S.L.U.	2010	One 14" pipeline for loading sulphuric acid. Throughput depending on the vessel.
Fertiberia, S.L. (Fertiliser) jetty	A.P.H.	1966 1999	An ammonia pipeline (loading/unloading) 200 to 250 tonnes/hour. Conveyor belt for loading (NPK, DAP, MAP fertilisers) 300 to 400 tonnes/hour. The company currently using this is Fertiberia S.L.
Single buoy crude oil terminal	CEPSA	1966	Draught: 16.50 m 3,800 tonnes/hour

Location	Owner	Year of manufacture	Characteristics
Arenillas Tower Oil Tanker Quay	A.P.H.	1966	8 loading arms per berth.
			South berth:
			5 loading arms
			1 arm for deballasting
			1 arm for loading liquefied gases
			11 loading arm for vapour return
			Berth N:
			5 loading arms
			1 arm for deballasting
			1 loading arm for benzene
			1 loading arm for cyclohexane
			Throughput:
			Heavy products and medium distillates 1000 m³/h
			Benzene and cyclohexane 250 m³/h
			Liquefied gases 250 m³/h
			Gasoline/petrol 700 m³/h
			The only company using this installation at present is Cepsa
		1075	Throughput:
Atlantic Copper, S.L.U. jetty TNP-2	ATLANTIC COPPER, S.L.U.	1975	200 mm pipeline for sulphuric acid or 250 m³/h

Location	Owner	Year of manufacture	Characteristics
Reina Sofía Jetty	CEPSA	1976	<pre>4 loading arms per berth. Berth E: 2 x 12" lines for benzene and ballast 4 x 14" lines for fuel oil, asphalt, vegetable oil and biodiesel 6 x 8" lines for phenol, acetone, propylene, methanol, soda and benzene 1 x 4" line for return 1 x 10" line for Petrosol Berth O: 2 14" lines for fuel oil and asphalt 8" arm on East berth - 1 x 12" line for ballast 8" arm on West berth - 4 x 8" lines for phenol, acetone, propylene and cumene 1 x 4" line for return 1 x 6" line for A.M.S. Berth C; 1 x 10" line for ethanol Two 6" loading arms on West berth - 1 x 8" line for methanol 4th Berth: 3 x 12" lines for VGO, ballast and naphtha 4 x 14" lines for fuel oil, asphalt, vegetable oil and biodiesel Throughput depending on the vessel</pre>
Levantino-Aragonesa de Tránsitos, S.A. jetty	Levantino-Aragonesa de Tránsitos, S.A.	1981	One 8" pipeline for unloading phosphoric and sulphuric acid. Throughput depending on the vessel.
Atlantic Copper, S.L.U. jetty TNP-1	ATLANTIC COPPER, S.L.U.	1984	One 14" pipeline for loading/unloading sulphuric acid and caustic soda. Throughput depending on the vessel.
South Quay	A.P.H.	1987	One Roll-On Rol-Off ramp for vessels. Capacity: 2 vessels. Width: 27.51 m. Length: 50.40 m

Location	Owner	Year of manufacture	Characteristics
Enagas, S.A. jetty	ENAGAS, S.A.	1988	Two arms for unloading LNG at 2,000 m³/h c.u. Arm for handling LPG. Four 16" arms for LNG. One loading arm for vapour return.
Decal España North jetty	DECAL ESPAÑA, S.A.	1995	Five arms for loading/unloading liquid fuels. One of 1,250 m <sup>3</sup> /h for diesel fuel. One of 750 m <sup>3</sup> /h for gasoline/petrol. One of 800 m <sup>3</sup> /h for cyclohexane. One of 1,250 m <sup>3</sup> /h for oil. One 600 m <sup>3</sup> /h hose for methanol.
Decal España South jetty	DECAL ESPAÑA, S.A.	2009	Five arms for loading/unloading liquid fuels. One of 1,250 m <sup>3</sup> /h for diesel fuel. One of 1,250 m <sup>3</sup> /h for oil. One of 1,250 m <sup>3</sup> /h for methyl ester. One of 1,250 m <sup>3</sup> /h for fuel. One of 600 m <sup>3</sup> /h for methanol.
Decal España South jetty 2	DECAL ESPAÑA, S.A.	2021	Six arms for loading/unloading liquid fuels.
Impala quay	IMPALA TERMINALS HUELVA, S.L.	2015	Length: 240 mts. Dead weight: 80.000 DWT. Conveyor belts for loading/unloading metal concentrates of 1000 tonnes/hour.

### 2.5.4 Auxiliary material for loading, unloading and transportation

Material Type	Owner	N.°	Power used	Characteristics
Forklift trucks	Algeposa	1	Diesel fuel	5 Tm
Forklift trucks	Algeposa	1	Diesel fuel	40 Tm
Automatic Clamshell Buckets	Algeposa	1		70 m <sup>3</sup>
Automatic Clamshell Buckets	Algeposa	1		52 m <sup>3</sup>
Automatic Clamshell Buckets	Algeposa	1		47,5 m <sup>3</sup>
Automatic Clamshell Buckets	Algeposa	1		42,5 m <sup>3</sup>
Automatic Clamshell Buckets	Algeposa	1		33 m <sup>3</sup>
Automatic Clamshell Buckets	Algeposa	1		28 m <sup>3</sup>
Automatic Clamshell Buckets	Algeposa	1		23,5 m <sup>3</sup>
Automatic Clamshell Buckets	Algeposa	1		16 m <sup>3</sup>
Automatic Clamshell Buckets	Algeposa	1		12 m <sup>3</sup>
Loaders	Algeposa	1	Diesel fuel	L90E
Loaders	Algeposa	1	Diesel fuel	L150E
Loaders	Algeposa	1	Diesel fuel	L150E
Loaders	Algeposa	1	Diesel fuel	L120C
Loaders	Algeposa	1	Diesel fuel	L180E
Loaders	Algeposa	1	Diesel fuel	L120D
Loaders	Algeposa	1	Diesel fuel	L220E
_oaders	Algeposa	1	Diesel fuel	L180F

Material Type	Owner	N.º	Power used	Characteristics
Loaders	Algeposa	1	Diesel fuel	L110F
Automatic Clamshell Buckets	Algeposa	1		40 m <sup>3</sup>
Automatic Clamshell Buckets	Algeposa	1		8 m³
Backhoe	Algeposa	1	Diesel fuel	40MTC
Hydraulic hopper	Algeposa	1	Electrical	50 Tm
Conveyor Belt Feeder	Bergé	1	Electrical	350m <sup>3</sup>
Forklift trucks	Bergé	1	Diesel fuel	12 Tm
Conveyor belts	Bergé	1	Electrical	500 Tm/h
Conveyor belts	Bergé	1	Electrical	TAIM-TFG
Automatic Clamshell Buckets	Bergé	2		40 m <sup>3</sup>
Automatic Clamshell Buckets	Bergé	1		35 m <sup>3</sup>
Loaders	Bergé	1	Diesel fuel	L35B
Loaders	Bergé	1	Diesel fuel	L70D
Loaders	Bergé	1	Diesel fuel	L70E
Loaders	Bergé	1	Diesel fuel	L70F
Loaders	Bergé	1	Diesel fuel	L180F
Automatic grab bucket	Bergé	1		40 m <sup>3</sup>
Bulk hopper	Bergé	2	Electrical	150 Tm
Bulk hopper	Bergé	2	Electrical	300 Tm
Loaders	Bergé	2	Diesel fuel	L150F

Material Type	Owner	N.º	Power used	Characteristics
Loaders	Bergé	7	Diesel fuel	L180H
Loaders	Bergé	1	Diesel fuel	L110F
Conveyor Belt Feeder	Congrasur	1	Electric / Autonomous (Diesel Gen)	500Tm/h
Conveyor belts	Congrasur	1	Electric / Autonomous (Diesel Gen)	500 Tm/h
Conveyor belts	Congrasur	1	Electrical	700 Tm/h
Conveyor belts	Congrasur	1	Electrical	900 Tm/h
Loaders	Congrasur	2	Diesel fuel	L150H
Loaders	Congrasur	3	Diesel fuel	L120H
Loaders	Congrasur	1	Diesel fuel	L120E
Loaders	Congrasur	1	Diesel fuel	L180E
Loaders	Congrasur	1	Diesel fuel	L120G
Loaders	Congrasur	2	Diesel fuel	L110H
Loaders	Congrasur	1	Diesel fuel	L70F
Forklift trucks	Axor	1	Diesel fuel	C50s 5 Tm
Forklift trucks	Ership	1	Diesel fuel	H788Tm
Backhoe	Clean derbis	1	Diesel fuel	280LC
Automatic Clamshell Buckets	Ership	13		
Bulk hopper	Ership	2	Electrical	150 Tm
Loaders	Ership	9	Diesel fuel L15	
Loaders	Ership	3	Diesel fuel L110	

Material Type	Owner	N.º	Power used	Characteristics
Loaders	Joga	1	Diesel fuel	L180 H
Loaders	Joga	1	Diesel fuel	L180 H
Loaders	Joga	1	Diesel fuel	L180 H
Loaders	Joga	1	Diesel fuel	L220 H
Loaders	Carvaca	1	Diesel fuel	L150H
Loaders	Carvaca	1	Diesel fuel	L180 H
Loaders	Carvaca	1	Diesel fuel	L150H
Loaders	Carvaca	1	Diesel fuel	L180F
Loaders	Carvaca	1	Diesel fuel	L150H
Automatic Clamshell Buckets	Servimad	1		40 m <sup>3</sup>
Bulk hopper	Servimad	1	Electrical	140 m <sup>3</sup>
Loaders	Servimad	1	Diesel fuel	950G
Loaders	Servimad	1	Diesel fuel	L-180F
Tractor unit	Yilport Huelva	9	Diesel fuel	450 CV
Forklift trucks	Yilport Huelva	1	Diesel fuel	16 Tm
R.Stacker	Yilport Huelva	5	Diesel fuel	CS45

### 2.5.5 Other auxiliary material

Material Type	Owner	N.º	Power used	Characteristics
Articulated Platform	Algeposa	1	Electrical	50 Tm
Lifting Platform	Bergé	1	Electrical	20PX
Sundry vehicles	Bergé	1	Diesel fuel	Automatic
Sweeper	Congrasur	1	Diesel fuel	PIQUERSA
Sweeper	Congrasur	1	Diesel fuel	AUSA
Telescopic Platform	Congrasur	1	Diesel fuel	GENIE
Sweeper	Ership	1	Diesel fuel	2500ACH
Lifting Platform	JZarrias	2	Diesel fuel	HA 16 DX
Lifting Platform	Ership	2	Diesel fuel	HA 26 DX
Towing Platform	Yilport Huelva	8		
Drum Loader	Zalviport	1	Diesel fuel	
Lifting Platform	Zalviport	1	Electrical	6x4 m <sup>3</sup>
_ifting Platform	Zalviport	1	Electrical	3x4 m <sup>3</sup>
Electric Pallet Truck	Zalviport	7	Electrical	2 Tm

### 2.6 Floating equipment

### 2.6.1 Dredgers

Not applicable.

### 2.6.2 Tugs

Name	Owner	Power used	Length (m)	Beam (m)	Draught (m)	Power (HP)	Year of manufacture
V.B. Cierzo	Auxmasa - G. Boluda	Diesel fuel	29.50	11.00	4.00	5,230	2002
V.B. Milonga	Auxmasa - G. Boluda	Diesel fuel	18.70	8.00	2.69	1,176	2022
V.B. Boluda Mari	Auxmasa - G. Boluda	Diesel fuel	27.46	8.50	4.65	2,510	1989
V.B. Bora	Auxmasa - G. Boluda	Diesel fuel	29.50	11.00	4.00	5,230	2001
V.B. Huelva	Auxmasa - G. Boluda	Diesel fuel	29.50	11.00	4.00	4,080	1995
V.B. Talisman	Auxmasa - G. Boluda	Diesel fuel	32.50	11.50	4.00	5,163	2000
Sertosa Cinco	Auxmasa - G. Boluda	Diesel fuel	26.80	7.70	3.88	2,250	1967
V.B. Bravo	Auxmasa - G. Boluda	Diesel fuel	35.50	13.00	6.70	8,150	2009
V.B. Boreal	Auxmasa - G. Boluda	Diesel fuel	33.50	12.50		6,800	2000
Yarcla*	Auxmasa - G. Boluda	Diesel fuel	15.00	5.50	2.39	510	1999
Yarcla Cinco	Auxmasa - G. Boluda	Diesel fuel	22.00	7.00	2.90	2,200	2000
Yarcla Quince	Auxmasa - G. Boluda	Diesel fuel	25.00	7.20	2.84	1,220	1963
Río Coa	Amadesan, S.L.	Diesel fuel	15.87	4.67	1.62	365	1965
Gogor	Amadesan, S.L.	Diesel fuel	26.80	7.91	3.97	2,030	1977
Aitor Uno	Amadesan, S.L.	Diesel fuel	21.50	7.15	3.80	1,400	1978

\*Fitted with a 2.5 tonne crane.

### 2.6.3 Dump Scows, Lighters and Barges

Name	Owner	Power used	Power (HP)	Length (m)	Beam (m)	Draught (m)	Year of manufacture
Yarcla Seis	Boluda Port Services	Diesel fuel	650	20.00	7.20	3.15	2005
Yarcla Catorce	Boluda Port Services	Diesel fuel		14.00	3.86		1994
Yarcla Diecisiete	Boluda Port Services	Diesel fuel	700	15.00	6.00		
Oizmendi	Itsas Gas Bunker Supply, S.L.	Diesel fuel	1,074	80.00	15.00	5.25	2009
Amadesam nueve	Amadesam, S.L.	Diesel fuel	194	20.00	5.48	2.59	1966
Cisterna Dos	Amasur, S.L.	Diesel fuel	240	15.00	5.00	2.50	1978
Green Huelva	Amasur, S.L.	Diesel fuel	564	19.25	8.80	2.60	2018

### 2.6.4 Floating Cranes

Namo	Owner	Power used Char	Characteristics	Characteristics of the work			Year of
Name	Name Owner Power used			Reach (m)	Height above sea (m)	manufacture	
Pontodiel	Boluda Port Services	Towing	Load: 250 tonnes	20	-	-	2009

### 2.6.5 Other auxiliary floating service equipment

Name	Owner	Туре	Characteristics	Year of manufacture
Punta del Sebo	Serodiel, S.L.	Catamaran	2 x 190 HP motors and length of 18.70 m	1997
Canoa de Punta Umbría	Tourdetania Tour, S.L.	Tourist tickets	24 m long and 6.28 m beam	
Villa de Palos	Serodiel, S.L.	Tourist tickets	2 x 102 kW motors and length of 15.33 m	1993
Segundo Castillo	Amadesam, S.L.	Auxiliary vessel	325 kW and length of 22 m	1993

Name	Owner	Туре	Characteristics	Year of manufacture
Amadesam diez	Amadesam, S.L.	Auxiliary vessel	331 kW and length of 20 m	
Amadesam 7	Amadesam, S.L.	Auxiliary vessel	2 x 231KW motors and length of 14.4 m	2014
Yarcla Cuatro	<b>Boluda Port Services</b>	Auxiliary vessel	2 x 280 HP motors and length of 9.5 m	2007
Yarcla Once	<b>Boluda Port Services</b>	Auxiliary vessel	2 x $$ 550 CV motors and length of 15 m	1993
Yarcla Catorce	<b>Boluda Port Services</b>	Auxiliary vessel	2 x 40 CV motors and length of 14 m	1994
Isla de Bacuta	<b>Boluda Port Services</b>	Auxiliary vessel	2 x 315 CV motors and length of 12 m	

### 2.7 Land access and communications

#### 2.7.1 Land access and inland communications

The main routes connecting the Port of Huelva with its hinterland are as follows:

- A-472 Seville-Huelva.
- A-49 Seville-Huelva-Ayamonte (motorway).
- A-492 Aljaraque N-431.
- N-431 Huelva-Portugal (via Ayamonte).
- N-435 Badajoz-Huelva.
- N-442 Huelva-Mazagón.
- H-624 From the Outer Port to San Juan del Puerto, bypassing Palos de la Frontera and Moguer.

The Port of Huelva is laid out in a linear manner along the Odiel estuary, where the traditional docks are laid out. These are accessed via urban roads such as Avenidas Norte, Sur, Sanlúcar de Barrameda, Real Sociedad Colombina Onubense and Tomás Domínguez Ortiz, and the Huelva estuary, which is home to the industrial installations of the outer port.

Francisco Montenegro Avenue and the bridge over the Tinto River join the inner quays with the outer port of Huelva, in such a way that both areas share common accesses, despite their different functions and the distance separating them.

The road connection with the Guadalquivir valley and the centre of the peninsula is via the A-49 to Seville, and from that point via the N-IV Andalusia

dual motorway. Therefore, this road connects to the trunk roads in the state road network.

The connection between Portugal and the western area of Huelva is via the N-431 and the A-492, Fperpencwhich connect to the section of the A-49 dual carriageway between Huelva and Portugal..

The Ayamonte international bridge connects to the Portuguese road network, which runs from the border to the Algarve region via a motorway, which in turn is connected to the motorway to Lisbon. As far as traffic with Portugal is concerned, it should be noted that the only Portuguese port that deals with ships with a large draught is Sines, meaning that Huelva's area of influence for certain types of maritime traffic can include Portuguese regions of lower Alentejo and Algarve.

Moreover, traffic from the west can access the Port via the N-431 or the A-492. It has been identified that, when approaching the city, the traffic that goes to the inner quays accesses the city by the A-492 (Aljaraque to the N-431) instead of using the N-431 and Avda. Cristóbal Colón-Paseo Marítimo-Avda. Hispanoamérica, which is a significantly shorter route, as a result of which access to the port is gained from Aljaraque or Corrales over the new bridge on the River Odiel.

To go to the Outer Port, the traffic coming from the west is channelled along the N-431, bypassing the city to the north up to the A-49 branch road. which joins Huelva and then takes the south-east ring-road The connection to the

N-435 (Badajoz - Huelva) is made from the Trigueros junction on the A-49. This motorway channels the access traffic to the city and the port in both directions, and is the the main route for accessing the industrial area of Huelva. The access to the outer port from the A-49 connects to the southwest ring road, a dual carriageway that acts as a bypass of the centre of Huelva, thus avoiding urban areas and coming out on the N-422, which provides access by dual carriageway to the outer port via the bridge over the River Tinto. The N-442 (Huelva-Mazagón) is the main thoroughfare for the outer port, and is particularly important for inner port and industrial traffic. This connection allows the transportation of hazardous goods.

When evaluating road accessibility to the Port of Huelva, it is necessary to stress the importance of local and regional traffic, as nearly 80% of the traffic originates from or is going to points within a 50 km radius, which relates to the industrial area adjacent to the port or the mining installations in the region.

The Port Authority of Huelva has a road network that serves its installations and service area well. The main artery is the roue made up of Avenida de Hispano América, Avenida Francisco Montenegro (the road to Punta del Sebo) and the Tinto Bridge, which link interior docks and the outer port. Traffic from Portugal, Extremadura or Seville has easy access to the service area from the A-49 motorway or CN-431. Local traffic also flows fluidly thanks to an adequate and sensible network of roads and highways.

The names and characteristics of the different roads for which the Authority is responsible are listed below:

Port	Zone	Description	Name of Road	Code	Length (m)	Width (m)	Surface type
Inside	1	Pol. Pesquero Norte and shipyard area	Almadraba Street	C.Z01.ALM	308.00	10.5	Flexible with asphalt road surface
Inside	1	Pol. Pesquero Norte and shipyard area	Alonso Ojeda Street	C.Z01.ALO	672.00	10.9	Flexible with asphalt road surface
Inside	1	Pol. Pesquero Norte and shipyard area	Arrastre Street	C.Z01.ARR	791.00	10.5	Flexible with asphalt road surface
Inside	1	Pol. Pesquero Norte and shipyard area	Cerco Street	C.Z01.CER	422.00	5.40/10.5	Flexible with asphalt road surface
Inside	1	Pol. Pesquero Norte and shipyard area	Enlace Avenue	C.Z01.ENL	398.00	10.9	Flexible with asphalt road surface
Inside	1	Pol. Pesquero Norte and shipyard area	Unión Alonso Ojeda Street with Molino Avenue	C.Z01.MOL	55.00	11.5	Flexible with asphalt road surface
Inside	2	Levante Quay Surroundings	Hispanoamérica Avenue	C.Z02.HIS	1,324.00	13.4	Flexible with asphalt road surface/ concrete
Inside	2	Levante Quay Surroundings	Norte Avenue	C.Z02.NOR	181.00	16.4	Flexible with asphalt road surface
Inside	2	Levante Quay Surroundings	Real Colombina Onubense Avenue	C.Z02.RSO	128.00	7.5	Flexible with asphalt road surface
Inside	2	Levante Quay Surroundings	Sanlucár de Barrameda Avenue	C.Z02.SLU	166.00	7.5	Flexible with asphalt road surface
Inside	2	Levante Quay Surroundings	Levante Dock Pavement	M.LEV.PAV	1,324.00	80/variable	Rigid with concrete road surface and paving stone
Inside	3	P.I. Punta del Sebo.	Cristobal Donante Street	C.Z03.CRI	1,386.00	7	Flexible with asphalt road surface
Inside	3	Francisco Montenegro Avenue	Francisco Montenegro Avenue	C.Z03.FCO	4,760.00	20.67	Flexible with asphalt road surface/ concrete
Inside	3	P.I. Punta del Sebo.	Unnamed Street	C.Z03.IOC	553.00	7/18	Flexible with asphalt road surface
Inside	3	Francisco Montenegro Avenue	Monumento a la Fe Descubridora rd.	C.Z03.MON	258.00	7	Flexible with asphalt road surface
Inside	3	P.I. Punta del Sebo.	Sabina Negral.TR0 Street	C.Z03.TR0	789.00	7	Flexible with asphalt road surface
Inside	3	P.I. Punta del Sebo.	Joaquín Turina-TR1 Street	C.Z03.TR1	949.00	7	Flexible with asphalt road surface
Inside	3	P.I. Punta del Sebo.	Isaac Albeniz-TR2 Street	C.Z03.TR2	621.00	7	Flexible with asphalt road surface
Inside	3	P.I.Punta del Sebo.	Calderón de la Barca-TR3	C.Z03.TR3	821.00	7	Flexible with asphalt road surface

Port	Zone	Description	Name of Road	Code	Length (m)	Width (m)	Surface type
Inside	3	P.I.Punta del Sebo.	TRANSVERSAL 4	C.Z03.TR4	621.00	7	Rigid with concrete road surface
Inside	3	P.I.Punta del Sebo.	TRANSVERSAL 5	C.Z03.TR5	840.00	7	Flexible with asphalt road surface
Inside	3	Francisco Montenegro Avenue	Margen Izq. Odiel crosswalk	C.Z03.VER	3,550.00	8.4	Flexible with asphalt road surface
Inside	3	P.I.Punta del Sebo.	ZAL	C.Z03.ZAL	409.00	10.9	Flexible with asphalt road surface
Outside	4	Puerto Exterior P.I. Surroundings. New Port	Costera rd.	C.Z04.CCO	6,700.00	7/18	Flexible with asphalt road surface
Outside	4	Puerto Exterior P.I. Surroundings. New Port	Posterior rd.	C.Z04.CPO	7,156.00	18/9	Flexible with asphalt road surface
Outside	4	Puerto Exterior P.I. Surroundings. New Port	Perpendicular 1 Street (BERGÉ)	C.Z04.PP1	261.00	7	Flexible with asphalt road surface
Outside	4	Puerto Exterior P.I. Surroundings. New Port	Perpendicular 2 Street(García Munté)	C.Z04.PP2	256.00	7	Flexible with asphalt road surface
Outside	4	Puerto Exterior P.I. Surroundings. New Port	Perpendicular 3 Street (CALLE A)	C.Z04.PP3	233.00	7	Flexible with asphalt road surface
Outside	4	Puerto Exterior P.I. Surroundings. New Port	Perpendicular 4 Street (DECAL)	C.Z04.PP4	246.00	7	Flexible with asphalt road surface
Outside	4	Puerto Exterior P.I. Surroundings. New Port	Public apartment next to MIJG	C.Z04.PR1	800.00	9	Rigid - concrete
Outside	4	Puerto Exterior P.I. Surroundings. New Port	Bar Nuevo Puerto Aparment	C.Z04.PR2	100.00	50/variable	Flexible with asphalt road surface
Outside	4	Puerto Exterior P.I. Surroundings. New Port	Palos-Rábida Street	C.Z04.RAB	200.00	18	Flexible with asphalt road surface
Outside	4	Puerto Exterior P.I. Surroundings. New Port	Bridge of Tinto (N-442)	C.Z04.TIN	915.00	14	Rigid (concrete) with asphalt roadway
Outside	4	Puerto Exterior P.I. Surroundings. New Port	Pavement of the Ciudad de Palos Pier	M.CIP.PAV	250.00	40/variable	Flexible with asphalt road surface

Port	Zone	Description	Name of Road	Code	Length (m)	Width (m)	Surface type
Outside	4	Puerto Exterior P.I. Surroundings. New Port	Pavement of the Ing. Juan Gonzalo Pier	M.IJG.PAV	950.00	15/variable	Rigid - concrete
Outside	4	Puerto Exterior P.I. Surroundings. New Port	Pavement of the Minerales Pier	M.MIN.PAV	600.00	35/variable	Flexible with asphalt road surface
Outside	4	Puerto Exterior P.I. Surroundings. New Port	Pavement of Petrolero Pier	M.PTR.PAV	150.00	3.6	Rigid - concrete
Outside	4	Puerto Exterior P.I. Surroundings. New Port	Pavement of Remolcadores Pier	M.REM.PAV	100.00	15	Flexible with asphalt road surface
Outside	4	Puerto Exterior P.I. Surroundings. New Port	Pavement of South Pier	M.SUR.PAV	750.00	80/variable	Flexible with asphalt road surface
Outside	4	Puerto Exterior P.I. Surroundings. New Port	Villafría industrial estate	-	-	-	Flexible with asphalt road surface
Dock	5	Juan Carlos I Dock	Juan Carlos I Road (PK 0+00 al 14+310)	C.Z05.DIQ	14,310.00	10	Flexible with asphalt road surface
Dock	5	Juan Carlos I Dock	Juan Carlos I dock Road (PK 14+310 al 24+210)	C.Z05.DIQ	9,900.00	5.7	Rigid - concrete
TOTAL					65,203.00		

The railway access to the port of Huelva is provided by a branch of the RFIG from the Seville-Huelva line, which also connects with the Huelva-Zafra line. This branch serves the industrial area of the inner port on its eastern and western fronts, the Engineer Juan Gonzalo dock of the outer port, and the associated industrial area (Nuevo Puerto Industrial Park, Refinery, etc.).

From the Zafra-Huelva line, the Zafra-Jerez de los Caballeros freight branch supplies scrap metal and clinker to the Gallardo Group (steel and cement).

The distances from Huelva to the mentioned railway centers are:

- Huelva-Seville: 109 km
- Huelva-Zafra: 179 km

### 2.7.2 Map of inner communications and land access

See General Map of the Port of Huelva.

### 2.7.3 Map of land access

See General Map of the Port of Huelva.

### 2.8 Brief description of installations for specific traffic types

This section completes section 2.5.2 Special loading and unloading installations of this report and is dedicated to special loading and unloading installations, as a result of which the data on the characteristics of the installations it contains will not be repeated.

From the interior of the Ría del Odiel and listing them in the order in which they are physically located, the Port of Huelva has the following facilities for specific traffic types:

- FERTIBERIA, S.A. jetty (Phosphoric). This jetty, built in 1972 by Fosfórico Español, S.A. is currently used for acids.
- Atlantic Copper, S.L.U. north jetty. This one-berth jetty was built in 2010 by Atlantic Copper, S.A. It has a draught of 6.50 m and a 14" pipeline for loading sulphuric acid.
- FERTIBERIA, S.A. jetty (Fertilisers). Built in 1966 and, like the two jetties above, on the left bank of the River Odiel, this jetty is equipped for loading ammonia and also has a conveyor belt for loading fertilisers.
- Arenillas Tower Oil Tanker Quay. Built by the Administration in 1968, it has two independent berth that are used for the traffic of petroleum and petrochemical products, and mainly for loading/unloading refined products from/to CEPSA's "La Rábida" Refinery.

- Impala, S.L. Quay. This quay was built in 2015. It has a draught of 13 m and conveyor belts for loading/unloading metal concentrates with a capacity of 1,000 tonnes/hour.
- Atlantic Copper, S.L.U. jetty TNP 2. This jetty, which was built in 1975 by A.I.E.S.A, has pipeline installations for transferring sulphuric acid from the Atlantic Copper, S.L.U. factory.
- Atlantic Copper, S.L.U. jetty TNP 1. This one-berth jetty, which is located between the Levantino Aragonesas de Tránsitos, S.A. jetty and the Atlantic Copper, S.L.U.,TNP 2 jetty, came into service in 1984. It has a draught of 10 m and has a 14" pipeline for transferring sulphuric acid.
- Levantino Aragonesas de Tránsito, S.A. (formerly Fertinagro Sur, S.L.) jetty. This one-berth jetty is located between the Atlantic Copper, S.L.U. TNP 1 jetty and the Enagás jetty and came into service in 1981. It has a draught of 9.7 m and is equipped so that it can be expanded in the future. It has an 8" pipeline for transferring phosphoric and sulphuric acids.
- Enagás, S.A. jetty. This jetty, built by ENAGÁS between the Levantino Aragonesa de Tránsitos, S.A. (formerly Fertinagro Sur, S.L.U.) jetty and the Reina Sofía jetty for loading and unloading large vessels, came into service in 1988. It has a berth with a 12 m draught, equipped with loading

arms and a pipe network that connects it to the rest of the installations in the natural gas terminal. Its unloading capacity for the quay is 4,000  $m^3/h$  of LNG.

- **Reina Sofía Quay.** This quay is for loading and unloading bulk liquid. It was built in 1976 by U.E.R.T.S.A., now CEPSA, and is made up of an access gangway and four docking platforms. The four outer berths are equipped with the corresponding loading arms for liquid traffic.
- **Decal España, S.A. north jetty.** This jetty was built in 1995 by Catalana de Almacenajes Petrolíferos, S.A (now Decal España, S.A.) for unloading petrol and diesel products. This installation is also equipped with a loading/unloading arm for cyclohexane, one for oil and a hose for unloading methanol. It is located to the south of the Reina Sofia quay. It has a draught of 11.50 m (MLWS) and is made up of a gangway and platform, two berthing dolphins and four for mooring, Piled foundation concrete structure.
- **Decal España, S.A. south jetty.** This jetty was built in 2009 by Decal España, S.A. para for loading/unloading vegetable oils. This installation is also equipped with a loading/unloading arm for diesel, one for methyl ester, one for methanol and one for fuel. It is located to the south of the

Reina Sofia jetty. It has a draught of 12.50 m (MLWS) and is made up of a gangway and platform and four berthing dolphins. Piled foundation concrete structure.

- **Decal España, S.A. (south jetty 2).** EThis jetty was built in 2021 to replace the previous pier for mooring bunkering barges and will be used for loading and unloading commercial operations with larger vessels. The facility, jutting out around 100 m from the coastline, has two mooring and loading/unloading platforms, three berthing dolphins, pedestrian gangways, mooring fenders and quick release hooks.
- **Roll-on/roll-off ramp on the South Quay.** This ramp, which is currently owned by the Port Authority of Huelva, was built in 2011 by Naviera Armas, S.A., for ROPAX and roll-on roll-off vessels. A new regular line from Huelva to the Canary Islands has been started up with this installation. The ramp is 27.51 m wide and 50.40 m long, with the capacity to service two vessels.
- **Single buoy Terminal.** With a 22-metre draught on the chart, making it usable for vessels with a maximum draught of 16.50 metres, and linked to CEPSA's "La Rábia by a sea-line, there is a monobouy for receiving crude oil, with a maximum output of 3,800 Tm/h.