

ENVIRONMENTAL MANAGEMENT PLAN

PORT OF BAHÍA BLANCA

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ENVIRONMENTAL MANAGEMENT PLAN

PORT OF BAHÍA BLANCA

I. PRESENTATION OF THE ORGANIZATION

The Consorcio de Gestión del Puerto de Bahía Blanca (CGPBB) is a non government public organization created by Act number 11414 of the legislature of the province of Buenos Aires.

Since September 1, 1993, a managing committee formed by nine representatives of different areas, together with fifty seven (57) persons working as direct employees, manage and participate in the port operations and development of companies specialized in cereal, oilseeds and byproducts, fuels, gases and chemical byproducts.

From a historical point of view, the Bahía Blanca port complex is the first and main deep water port of the Argentine Republic (45 foot depth). Its facilities stretch for 25 km along the Northern coast of the estuary and it has a 92 km long access channel.



II. INTRODUCTION

Environmental care should be understood by the organization as a key factor to be considered when defining policies and strategies for every activity.

The CGPBB should always proceed without contradiction between sustainability and competitiveness, because an environmentally proper development provides more commercial opportunities and better economic benefits in a healthy environment.

In the globalization process, ports face an increasing competition resulting from the pressure exerted by the clients to reduce costs and increase services, without disregarding the development of an environmental policy that results in a responsible relationship with the community affected to the port area.

Successful ports are competitive, efficient and meet environmental protection legal requirements, so that there is no contradiction between sustainability and competitiveness, since proper environmental development provides economic benefits and opportunities.

Understanding the above mentioned, aware of the playing rules every successful, competitive and efficient port has to follow and aiming at meeting the legal requirements in force, the Safety and Environment Area (SyMA, for its acronym in Spanish), develops and controls the following programs:

→ **Safety and health** – Daily, and through specialized personnel, the SyMA area addresses and performs analysis and assessments of safety, contingency management and emergency procedures that allow us to be ready and trained to prevent or act correctively according to the circumstances.

To achieve a better performance and to accomplish these goals, in 2007, the company certified the Standards OHSAS 18001 that make it possible to verify thoroughly all our performance indicators.

→ **Litter and wastes** – At present, the Consorcio is able to manage all vessel solid and/or liquid wastes.

For this task, the SyMA area performs a follow up (with indicators showing the completion of that action) that ensures the removal, transport and final disposal of the wastes coming from ships that request these services.

→ **Dredging and dredging material disposal** - Environmental implications of dredging have significant impacts.

The participation of the Environmental Authority in these issues is indispensable, both for its control and for the validation of the tasks performed.

→ **Water quality** - Underground and surface water can be affected by port activities.

For this reason, the follow up of diverse parameters has been implemented to verify the condition of these resources.

This follow up is performed directly with our own actions and also through by third parties verifications, both in effluents and receiving bodies that may be affected.

→ **Fuel supply** - Fuel supply activities should be particularly monitored to prevent spills.

For this purpose, the facilities should have the appropriate technology and should be in optimum conservation and maintenance conditions.

It is also necessary to prepare safe procedures, to instruct personnel and to have equipment to fight and control spills that damage water quality and, therefore, affect water life significantly.

This activity entails a follow up by the Consorcio de Gestión to minimize incidents that affect the environment.

→ **Noise** - One of the most important issues in the relationship of ports with their surroundings is the noise level generated by port operations.

The noise is not only highly disturbing, but it means physical and mental stress and it affects health.

The reduction of noise level with mufflers or with simple regular repairs and maintenance decreases harmful dBA levels and improves work health.

A follow up of noise level parameters is implemented to check impact occurrence.

→ **Soil contamination** – Uncontrolled anthropic activity may cause severe soil contamination events.

Therefore, analytes are measured that allow stating soil quality, both in the water current beds and in land.

This monitoring is made with our own resources, checking also plans implemented by third parties.

→ **Air quality** - Handling of dry bulks is the most significant dust source, extending to inhabited areas, where it is not only disturbing but it also has a negative impact on health.

The follow up of particulate material recordable values performed today, makes it possible to check the implementation of the minimization measures applied.

→ **Use of energy** - From the environmental and economic point of view, it is increasingly significant to use energy rationally, the emission of exhaust gases from fossil fuels (non renewable energy) causes air contamination and imposes the use of fuel in the short term.

As Port Authority, we accompany the projects implemented by third parties to achieve energy rationalization goals.

→ **Dangerous loads** - Flammable products can evaporate, ignite and even explode.

If the gases are toxic, people can be seriously affected, and consequences for water, soil and fauna can be disastrous and highly expensive to remediate, in some cases with irreparable consequences. To minimize the occurrence of events we participate actively in the control sectors that verify handling of hazardous loads.

III. ENVIRONMENTAL RECORDED ACTIVITIES (Environmental index)

1 - WASTE DISPOSAL MANAGEMENT

1.1 - Ship waste removal management

The legal framework for removing wastes from a ship, classified as equivalent to Domestic Wastes, is given by Ordinance PNA 02/98. Its observance is checked with the Annual Spreadsheet of Waste Removal from Ships. Land transport is an outsourced service, for which the assigned companies must be registered in the CGPBB and the Prefectura Naval Argentina. Each removal has a docket (one copy remains in the CGPBB), stating the waste classification and the volume removed with the local landfill as final destination. Procedure applied:

Area: Safety and Environment

PROCEDURE COMMISSION PB IP 03/ 07 - WASTE MANAGEMENT

Detail: Description of the procedure to apply the Waste Management Plan

Relevance: Non binding - Recommendation

Development: Unified procedure to Control the Bahía Blanca Port waste management plan. To perform the observance control of the Ship Waste Management Plan, implemented in the Port of Bahía Blanca, the ships will follow this procedure:

- 1) All ships moored in any terminal in the Ports of Ingeniero White or Galván will have during their stay a container where they will throw domestic wastes generated on board. Otherwise, the Terminal will immediately notify the Maritime Agency so that it provides the above mentioned waste container.
- 2) The company rendering the service should be registered at and authorized by Prefectura Naval Argentina, the Environmental Secretary of the Province of Buenos Aires and the Municipality of Bahía Blanca to transport domestic waste from the port to the landfill and further dumping there.
- 3) When bringing the container in, the transporter will hand in the corresponding docket with the scales ticket, when required. The docket should state the following:
 - 3.1. Name, address and phone of the company rendering the service.
 - 3.2. Number of authorization Registration issued by PNA.
 - 3.3. Transport (Truck plate number) and driver´s (last name, name and ID) data
 - 3.3. Container date of entry and number.
 - 3.4. Name, address and phone number of Maritime Agency or Ship-owner requesting the service.
 - 3.5. Name of the ship/s it is assigned to.
 - 3.6. Signature and printed name of the person receiving the container.

Also, the container number should be visible in the four sides of the container, and on its cover; it should be fully empty and clean, and its cover should be easy to open and to close air tightly, preventing waste spillage, odor emission or access of rodents.

- 4) When noticing wastes that are not domestic being thrown into the container or already inside it, you should report it immediately to the Maritime Agency.
- 5) Proceed in the same way if the container has not been taken away 24 hours after the ship has sailed off or after the responsible person has been notified to take it away.
- 6) When removing the container, this should be stated in the docket at the Terminal, detailing overleaf the date and time of exit and having it signed by the driver, with printed name and ID type and number.
- 7) Within FORTY EIGHT (48) hours after removing the waste container, the service rendering company should hand in at the terminal a copy of the Port Waste Reception Evidence, duly signed by the Ship Captain and Prefectura Naval Argentina, Prefectura Bahía Blanca; together with the Evidence of dumping at the appropriate landfill.
- 8) A copy of the documents stated in items 6 and 7 will be sent to the Safety and Environment Area of the Consorcio de Gestión del Puerto de Bahía Blanca to prepare the official statistics on domestic waste generation.

EVIDENCE OF ACCOMPLISHMENT CONTROL

Copy of dockets of ship waste removal

1.2 - Port waste removal management (Not from ship)

Port waste management is an outsourced service that includes gathering and transport of every domestic-like wastes generated in the offices and streets inside the port. The guidelines to be observed by the contractor are specified below:

Area: Safety and Environment
CONTAINER PROVISION AND DISTRIBUTION

Provide 19 containers with cover and 11 baskets in the following locations:

Port of Ing. White	QUANT .	CAPACITY
Access ex Iron Jetty	1	1 m ³
Fishermen harbor - PNA guard access	1	1 m ³
Fishermen Harbor - PNA vessels	1	1 m ³
Loading contracting center	1	1 m ³
Access Vélez Sarfield - PNA Guard	1	1 m ³
White truck yard	1	1 m ³
T . Salustio Street - Opposite Fruticultura Building	1	1 m ³
Corner T . Salustio and Río Iguazú	1	1 m ³
Corner T . Salustio and Islas Malvinas Streets	1	1 m ³
Corner street T . Salustio and Street 7	1	1 m ³
Guido Street – Opposite SENASA Office	1	1 m ³
Corner Grecia and 10 Streets	1	1 m ³
Corner 10 and Río Iguazú Streets	1	1 m ³
Pilling Street- Opposite Restaurante	1	1 m ³
Club Náutico BB (Yacht Club)	1	1 m ³
Puerto Galván	QUANT .	CAPACITY
Galván scales	1	1 m ³
Club Náutico Pueyrredón (Yacht Club)	1	1 m ³
Opposite PNA Guard	1	1 m ³
Opposite Liquid bulk access	1	1 m ³

The containers should be metal or plastic (PVC) with cover and wheels and the paper baskets should be plastic (PVC). The Contractor must remove wastes at least THREE (3) times per week, and coordinate with the CGPBB, before starting the service, the days to do so (only working days).

The rounds for removal should be made between 08:00 and 12.00 on each of the days agreed on. Waste removal from the port area should be made in closed vehicles to avoid spillage or flying away during transport to final disposal. Wastes will be deposited in a location authorized by the Municipalidad de Bahía Blanca (Landfill) and under the conditions set forth by the Municipality. Before starting the service, the Contractor should submit to the CGPBB the corresponding permit issued by the Municipality, certifying it is authorized to access the area of waste final disposal. When due to reasons beyond control of the Contractor (holidays, non working days), the gathering task is interrupted, it should be completed on the immediately previous working day at the same time. Eventually, the Consorcio will be able to modify the collection dates and times, due to operating reasons or port extraordinary activity. This momentary change will not justify the request of any compensation or payment of an additional amount by the Contractor. In the dates and times stated, the Contractor will start the collection round by Puerto Galván sector, to move then to Ingeniero White port. The procedure to be followed in each port will be:

- Access through scales to control the tare of the vehicle used.
- Waste collection and exit through scales to control weight and get the net collected weight.
- In this sector, two copies will be delivered of the document that shows the net weight removed, both will say “DISPOSICIÓN FINAL CGPBB (CGPBB FINAL DISPOSAL)”, the truck driver should hand in one at the access office in the corresponding Final Disposal Plant.
- Transport vehicles in charge of waste collection should start their round fully empty, i.e. with no waste load collected previously in areas out of the port jurisdiction.
- Before weighting in scales, it will be made sure the truck is empty.
- Transport vehicles should enter the final disposal plant ONLY with wastes coming from the service included in this call for bids, i.e. collected from the containers inside the port.

EVIDENCE OF ACCOMPLISHMENT CONTROL– Copy of dockets of waste removal from port

1.3 Slop Plant

At present, the SLOP receiving plant allows receiving and temporary depositing oily liquids from tank trucks. There is a project in progress, at its first stage, to connect the plant with the flammable liquid bulk jetty to make transport of these liquids easier through ducts, and thus facilitate the use as temporary deposit that will allow discharging these liquids to the ships. In a second stage, the SLOP will be collected from the deposits of the CGPBB plant to be then taken to final disposal. Today, the plant has enough receiving capacity in case an emergency requires safe deposit of liquids.

EVIDENCE OF ACCOMPLISHMENT: DOES NOT correspond until operations in the treatment plant are started

Area: Safety and Environment

1.4 Port special waste removal

The CGPBB complies with the obligation to follow up every special waste operation performed at the port, ensuring that wastes reach their corresponding final disposal. For the control of proper handling and logistics to be applied, the transport docket and the final disposal certificate are requested to generators of special wastes generated in land (Act 11720 of the Province of Bs. As.). This is to verify that both the transporting company and the final disposal facility are authorized by the OPDS. In the case of the removal of special wastes coming from ships (bilge water, SLOP, etc.), in addition to the authorizations granted by the province transport environmental authority and the treatment facility, they must have the authorizations issued by the national environmental authority, in charge of Prefectura Naval Argentina, for the control of transport entering/leaving the port.

EVIDENCE OF ACCOMPLISHMENT – docket of waste removal**2 - COMMUNITY ACTIONS****2.1 - Participation (as invited member) in the Comité de Control y Monitoreo – CCyM (Control and Monitoring Committee) (Act 12530)**

Since passing of Act of the Province of Buenos Aries 12530, the CGPBB attends the meetings of the Comité de Control y Monitoreo as set forth in the following sections:

Section 6 - The Control and Monitoring Committee is created, integrated by representatives of the Secretary of Environmental Policy, the Municipal Executive Branch, the Municipal Council of Bahía Blanca and the Universities of Bahía Blanca. The trade union of the specific sector should be invited, as well as organizations and institutions related to the port area safety and operation, other trade unions and trade union-business entities, environmentalist organizations and neighbor associations with jurisdiction in the area of application hereof. The committee will have a consultancy and counseling nature. The Enforcement Authority should request the Committee's opinion as prior condition to the solution of issues having to do with the Program execution. The rules will determine the number of representatives and the organization and operation standards. The participation of the members in the Control and Monitoring Committee will be honorary.

Section 7 – In addition to those set by the rules, the Committee will have the following general objectives: to counsel and participate in the preparation of alert, surveillance, control, education and citizen awareness plans about the control and monitoring program established in this Act and to assess its execution and the accomplishment of its goals.

2.2 - Participation in the Environment Counseling committee of the Municipal Council

The Port of Bahía Blanca participates in the Counseling committee of the Municipal Council, to deal with environmental problems affecting the entire city of Bahía Blanca.

It should be mentioned that as Counseling Committee, its conclusions and recommendations are not binding.

The goals of this Committee are:

- Counsel in projects referred to the control and reduction of contamination and to environmental preservation.
- Analyze and judge urban enterprises and location of industries.
- Keep updated the Municipal and Regional documentation and information center, based at the Municipal Council with free access for members of this Committee.
- Participate in and contribute to the preparation of a municipal program for Environmental Education
- Suggest modifications and expansion of the rules in force on environmental topics, as well as new rules it considers necessary.
- Prepare proposals, studies and work with recommendations to achieve the goals in Ordinance Number 6209.

2.3 - Participation in APELL Plan

The CGPBB participates actively in the APELL process, helping to prepare the community for eventual responses upon technological emergencies.

The APELL plan works actively in an emergency coordinated plan to manage accidents effectively and to prevent further catastrophes, teaching at the same time how to react in front of diverse emergency situations. For this purpose, the process has three committees: response, risk and diffusion, formed to protect the community against casualties and material losses, preventing damage to the environment.

To achieve this, it proposes to:

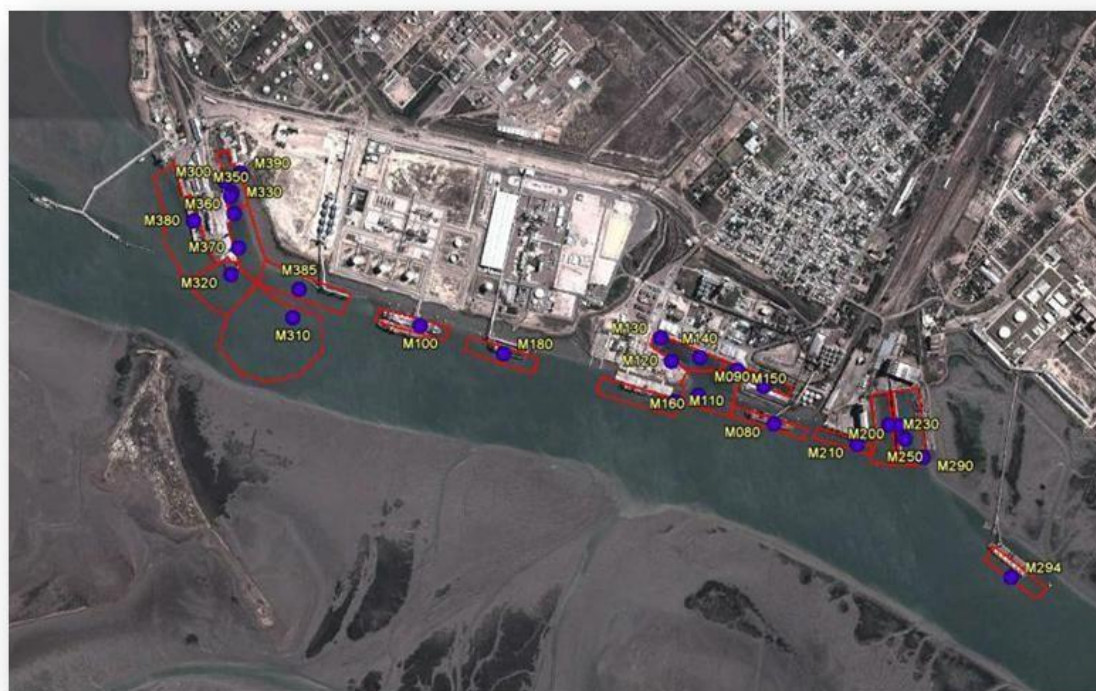
- Make the community and people in charge of safety aware of existing hazards at local level.
- Prepare an emergency coordinated plan to manage accidents effectively and avoid resulting catastrophes.
- Teach the community how to react upon different emergency situations.

3 - BAHIA BLANCA ESTUARY

3.1 - Water and sediment study at dredging sites

Since 1999, the CGPBB has a system to report sampling results from the Bahía Blanca Estuary, by sediment and water contaminant indicators, developed based on Dec. OPDS 268/02, which ratifies as environmentally fit the dredging works to maintain the depth of the access channel and the port of Bahía Blanca.

The Monitoring plan has a three-month frequency and makes it possible to get data before, during and after dredging. The monitoring results, which are compared to existing rules in similar systems (the Netherlands, Canada, USA), have never shown intervention values throughout history. The samples corresponding to the pre-dredging, post-dredging and during dredging campaigns are performed in the mooring jetties of the Puerto de Ingeniero White, Puerto Galván, Puerto Rosales and the BNPB, turning circle, channel areas to be dredged and dumping areas.



M1	Berth 5/6 TBB
M2	Berth 7/8 TBB
M3	Berth 9 TBB
M4	ACCESS MMC
M6	Fishermen harbor
M7	Berth 19 MMC
M7 BIS	Jetty 20
M8	Berth 5 PG
M9	Berth 6 PG
M10	Berth 7 PG
M11	Berth 2 / 3 PG
M12	GARBAGE DUMP V1
M13	NAVAL BASE ACCESS CHANNEL
M13 BIS	Puerto Rosales
M14	BETWEEN BUOYS 23 and 24
M15	MULTIPURPOSE JETTY
M16	MEGA
M17	PROFERTIL
M18	DREDGE CANTARA
M19	LA GOLFADA

In sediments:		
pH HYDROG POTENTIAL [upH]	Hg MERCURY	
Cd CADMIUM	HiDt TOTAL HYDROCARBONS	
Pb LEAD	PestCL ORGANOCHLORINATED	
Zn ZINC	PestP ORGANOPHOSPORATED	
Cr CHROMIUM		
In water:		
T TEMPERATURE [°C]	SULF SULFURS	Zn ZINC
TUR TURBIDITY [unt]	N AM AMMONIA NITROGEN	Cr CHROMIUM
pH HYDROG POTENTIAL [upH]	NA NITRATES	Hg MERCURY
BOD BIOCHEMICAL OXYGEN DEMAND	NIT NITRITES	HT TOTAL HYDROCARBONS
Odis DISOLVED OXYGEN	P PHOSPHORUS	Ocl ORGANOCHLORINATED
SS SUSPENDED SOLIDS	Cd CADMIUM	OFOFSF ORGANOPHOSPORATED
CIA CIANIDES	Pb	LEAD

The analysis performed by private laboratories or official institutions are sent to the Autoridad Ambiental Provincial (OPDS, Provincial environmental authority).

Each sampling has the corresponding custody chain certificate and the result report protocol; both documents are ratified by the technical professionals.

This Monitoring plan was prepared based on Decision OPDS 268/02, which ratifies the dredging works to maintain the depth of the access channel and the port of Bahía Blanca as environmentally fit.

The monitoring results are compared to the applicable existing rules in similar systems (the Netherlands, Canada, USA) where it has been verified that no value measured throughout time and space has exceeded the intervention values, understanding intervention as the concentration levels of analytes that negatively affect the ecosystem (water and sediment) and that have to be treated.

Also, its temporal variation is checked, comparing against existing studies of official organizations (IADO – Instituto Argentino de Oceanografía, Argentine Institute of Oceanography)

EVIDENCE OF ACCOMPLISHMENT: Protocol and Certificate of the Custody Chain of the OPDS

EXAMPLE OF MONITORING PLAN FOR A PRE-DREDGING CAMPAIGN:

MONITORING OF DEEPENING DREDGING: PRE-DREDGING ACTIVITIES

CONCLUSIONS OF THE RESULTS OBTAINED IN THE SEDIMENT AND WATER SAMPLING

Of all the samples taken, no signs of indicators were observed that upon assessment state the need of intervention or remediation actions, neither for water nor for sediments according to the standards used for comparison (TABLES 1 and 2).

1. Heavy metals in sediments

In order to assess the results obtained, reference values were taken for sediments from the NETHERLANDS standard for ecosystems similar to the Bahía Blanca estuary, because this is one of the strictest laws. There are no regulated values in the ARGENTINE standards that may be used to compare sediments.

The standard selected has two reference values for each indicator analyzed:

Alert value: it is expected not to be exceeded.

Intervention value: If it is exceeded, the area is identified as highly contaminated and its immediate remediation is recommended.

TABLE NO. 1 NETHERLANDS STANDARD

	ALERT VALUE (mg/kg – PPM)	INTERVENTION VALUE (mg/kg – PPM)
CADMIUM	0.8	12
LEAD	85	530
ZINC	140	720
CHROMIUM	100	380
MERCURY	0.3	10

PPM parts per million

CADMIUM (Cd)

All samples analyzed remain well below their intervention value. In no case (0%) the intervention value is exceeded. The maximum recorded value was 1.4 mg/kg (Item 8 – Turning circle Pto. Galván).

LEAD (Pb.)

No collected sample exceeds the alert value (0 %).

ZINC (Zn)

No collected sample exceeds the alert value (0 %).

CHROMIUM (Cr)

No collected sample in the CGPBB monitoring plan exceeds the alert value (0 %).

MERCURY (Hg)

No collected sample exceeds the alert value (0 %).

Latest sampling of sediments from 2013										
REFERENCE VALUES			SD	7/41	30/112	124/271	52/160	0.13/0.	SD	
LOCATION	PROTOCOL	DATE	pH	Cd	Pb	Zn	Cr	70 Hg	HT	
SEWAGE BB - Main discharge right side	00512204	04/01/2013	8.2	1.3	97	250	10	<0.1	85	
Dumping area by former R 229 opposite waste sewer	00512205	04/01/2013	7.7	1	16.5	32	4.5	<0.1	56	
Napostá stream and Ruta 252 North Side	00512206	04/01/2013	7.7	0.75	13.7	63	4	<0.1	<50	
Petrochemical complex discharge sewage	00512207	04/01/2013	7.9	0.85	10.5	58	7.5	<0.1	62	
Loma Paraguaya drainage channel - Petrobrás w/ S Martín Street	00512208	04/01/2013	7.6	0.8	9.2	36	4	<0.1	55	
End Club Almirante Brown	00512209	04/01/2013	7.7	0.9	17.5	72	5.2	<0.1	<50	
Saladillo Dulce affluent Road 3 Km 701.5	00512210	04/01/2013	7.7	1	8.4	29.4	5.5	<0.1	70	
Sauce Chico stream and Road 3	0051221	04/01/2013	7.8	0.3	2	17.8	1.7	<0.1	<50	
PUERTO ROSALES - PUERTO ROSALES	00512031	22/04/2013	7.9	0.6	4.1	41.2	4.2	<0.1	83	
Garbage dump D first sample Dredging 2012	00512032	22/04/2013	7.9	0.8	7.1	31.2	4.2	<0.1	103	
PUERTO BELGRANO - Green beacons access breakwater	00512033	22/04/2013	7.9	0.6	10.3	49.1	3.9	<0.1	97	
PUERTO BELGRANO - Between berths A and C opposite con	00512034	22/04/2013	7.7	0.6	9.7	51.4	5.8	<0.1	91	
Left boast between buoys 23 and 24	00512035	22/04/2013	7.7	0.29	4.8	22.8	2.9	<0.1	77	
North of Rata between By 26 and By 27	00512036	22/04/2013	7.9	0.5	5.8	29.4	4.1	<0.1	87	
Center Buoys 26 and 27	00512037	22/04/2013	8.1	0.2	3.3	15.8	1.7	<0.1	52	
Canal de la Vieja South exit	00512038	22/04/2013	7.9	0.5	7.4	37.2	4.5	<0.1	91	
MAIN CHANNEL by Buoy 28 - Variant 1-	00512039	22/04/2013	7.9	0.5	7.6	38.5	4.5	<0.1	84	
MAIN CHANNEL Buoy 30	00512040	22/04/2013	8	0.6	7.3	38.5	5.5	<0.1	79	
Canal de la Vieja - channel mouth 550 m South of sewage	00512041	22/04/2013	8.1	0.3	5.8	27.2	2.7	<0.1	95	
PIEDRABUENA Toepfer East behind	00512042	22/04/2013	7.6	0.6	9.7	46.6	5.2	<0.1	65	
South Beacon 1 opposite Toepfer new	00512043	22/04/2013	7.7	0.5	9.2	43.2	4.9	<0.1	89	
TOEPFER New Center	00512044	22/04/2013	8	0.6	8.9	43.2	4.2	<0.1	73	
TERMINAL B BLANCA - Berth 6	00512045	22/04/2013	7.9	0.8	11.3	55.4	6.3	<0.1	89	
TERMINAL B BLANCA - BERTH 9	00512046	22/04/2013	7.9	0.7	10.4	52.7	5.8	<0.1	86	
CARGILL - Cargill	00512047	22/04/2013	7.9	0.7	10.3	51.9	6.2	<0.1	78	
FISHERMEN HARBOR - Center still water	00512048	22/04/2013	8	0.8	11.5	61.2	6.1	<0.1	100	
MULTIPURPOSE - Berth 21 South	00512049	22/04/2013	7.9	0.7	8.3	27.9	4.2	<0.1	80	
Jetty Carranza Center still water	00512050	22/04/2013	8.1	0.5	6.4	31.9	3.9	<0.1	102	
South Beacon 2 opposite Berth 21	00512051	22/04/2013	7.9	0.5	6.4	31.9	3.9	<0.1	96	
MEGA - Mega East	00512052	22/04/2013	7.9	0.6	9.7	45.3	4.2	<0.1	87	
Dreyfus East	00512053	22/04/2013	7.9	0.5	10.7	44.3	4.9	<0.1	87	
West turning circle Galván close to Beacon 4	00512054	22/04/2013	7.9	0.6	10.7	51.7	6	<0.1	88	
South Beacon 5 opposite Liquid bulk jetty 1	00512055	22/04/2013	7.9	0.6	6.9	31.5	4.5	<0.1	87	
Liquid bulk opposite liquid bulk jetty 2	00512056	22/04/2013	7.9	0.8	10.3	50	6.2	<0.1	101	
Galván Stream opposite Esso jetty	00512057	22/04/2013	8.2	0.7	10.5	52	6	<0.1	91	
Galván end North Berth 2	00512058	22/04/2013	7.9	0.8	11.6	57.6	6.8	<0.1	95	
PUERTO GALVAN - BERTH 6	00512059	22/04/2013	7.9	0.9	12.6	61.8	7.8	<0.1	89	
MAIN CHANNEL by Buoy 28 - Variant 1-	00512450	27/06/2013	8	0.97	7.2	28	5.2	<0.1	87	
South Beacon 5 opposite Liquid bulk jetty 1	00560038	27/06/2013	7.8	1.3	8.2	30	6.4	<0.1	90	
West turning circle Galván close to Beacon 4	00560039	27/06/2013	7.9	1.1	7.2	27.5	5.7	<0.1	89	
South Beacon 2 opposite Berth 21	00560040	27/06/2013	8	0.9	5.5	23	4.1	<0.1	90	
South Beacon 1 opposite Toepfer new	00560041	27/06/2013	8.2	1.2	10	39.5	6.5	<0.1	88	
MAIN CHANNEL Buoy 30	00560042	27/06/2013	7.8	1.1	6.7	28.5	5.8	<0.1	91	
Center Buoys 26 and 27	00560044	27/06/2013	8.1	0.4	3.3	10.7	1.4	<0.1	78	
Left coast between buoys 23 and 24	00560045	27/06/2013	8.1	0.5	3.4	11.7	2	<0.1	85	
Garbage dump D first sample Dredging 2012	00560046	27/06/2013	8	1.2	7.7	31.7	6.5	<0.1	97	
Galván end North Berth 5	0051984	30/08/2013	7.6	1.2	10.8	47.5	7.2	<0.1	91	
Jetty Carranza Center still water	0051989	30/08/2013	7.8	1.2	11	45	7.2	<0.1	73	
South Beacon 2 opposite Berth 21	00512024	30/08/2013	7.9	1.1	8.7	34.5	6.2	<0.1	85	

Multipurpose Berth 21 West	00512025	30/08/2013	7.7	1	9.4	37.7	6.2	<0.1	82
FISHERMEN HARBOR - Center still water	00512026	30/08/2013	7.8	1.1	10.2	45	6.7	<0.1	76
TERMINAL B BLANCA - BERTH 9	00512027	30/08/2013	7.7	0.9	9.2	40	5.5	<0.1	86
TOEPFER New Center	00512028	30/08/2013	7.7	1.4	11.3	47.5	10.2	<0.1	91
South Beacon 1 opposite Toepfer new	00512030	30/08/2013	7.6	0.9	8.7	30	5.3	<0.1	88
DREYFUS JETTY	00512062	30/08/2013	7.7	1.2	10.2	40	7.2	<0.1	86
MEGA - Mega Center	00512167	30/08/2013	7.8	1.1	10	42.5	7.5	<0.1	9.2
PROFERTIL - Profertil Center	00512168	30/08/2013	7.8	0.8	9.2	35.5	5.2	<0.1	90
South Beacon 5 opposite Liquid bulk jetty 1	00512449	30/08/2013	7.8	0.9	6.7	24.2	6.4	<0.1	86
Vale jetty South	00512454	30/08/2013	7.8	0.9	9	36.5	5.5	<0.1	85
MAIN CHANNEL Buoy 30	00512455	30/08/2013	7.7	0.8	8.2	32	6.4	<0.1	79
MAIN CHANNEL by Buoy 28 - Variant 1-	00512456	30/08/2013	7.9	1.3	9	37.5	6.2	<0.1	86
Center Buoys 26 and 27	00512458	30/08/2013	7.9	0.3	4.2	13.5	1.4	<0.1	59
Left coast between buoys 23 and 24	00512459	30/08/2013	7.8	0.9	8.2	32.5	5.5	<0.1	93
PUERTO ROSALES Interior channel center	00512460	30/08/2013	7.8	1.2	12.2	50	7.5	<0.1	87
PUERTO BELGRANO - Access channel	00512461	30/08/2013	7.8	1.3	11.9	52.5	7.7	<0.1	86
PUERTO BELGRANO - Between berths A and C opposite con	00512462	30/08/2013	8	1.3	12	55	7.8	<0.1	88
MAIN CHANNEL Center Buoy 20 and 21 Dumping area	00512463	30/08/2013	8	0.9	8.3	33.5	5.7	<0.1	78
Liquid bulk opposite liquid bulk jetty 2	00560025	30/08/2013	7.8	0.7	5.2	24	3.6	<0.1	67
PUERTO BELGRANO - BUOY 27	00560073	30/08/2013	7.8	1.3	9	37.5	6.2	<0.1	89
West turning circle Galván close to Beacon 4	00560121	30/08/2013	7.7	1.2	9.5	39.7	7	<0.1	90

NOMENCLATURE

All values are stated in µg/g-dry weight [ppm] pH HYDROG POTENTIAL [upH]

Cd CADMIUM

Pb LEAD

Zn ZINC

Cr CHROMIUM

Hg MERCURY

HT TOTAL HYDROCARBONS

2. WATER

In order to assess the results obtained, reference values were taken for water from the NETHERLANDS standard for ecosystems similar to the Bahía Blanca estuary, because this is one of the strictest laws.

TABLE 2 NETHERLANDS standard

ELEMENT	ALERT VALUE (µg/– PPB)	INTERVENTION VALUE (µg/l– PPB)
CADMIUM	0,4	6
LEAD	15	75
ZINC	65	800
CHROMIUM	1	30
MERCURY	0,05	0.3

CADMIUM (Cd)

Of the total samples analyzed none exceeds the reference value.

ZINC (Zn)

Of the total samples analyzed none exceeds the reference value.

LEAD (Pb.)

Of the total samples analyzed none exceeds the reference value.

CHROMIUM (Cr)

Of the total samples analyzed none exceeds the reference value in no case. (0 %).

MERCURY (Hg)

Of the total samples analyzed none exceeds the reference value in no case. (0 %).

- To determine TOTAL HYDROCARBON (HT) values, Act 24051 on Hazardous wastes for the protection of water life in salty waters was considered Table 3 Annex II.

ELEMENT	REFERENCE VALUE (µg/lit - PPB)
TOTAL HYDROCARBONS	300

PPB : Parts per billion

TOTAL HYDROCARBONS (HT)

Of the total samples analyzed none exceeds the reference value in no case. (0 %).

OTHER PARAMETERS ANALYZED (TURBIDITY and PH).

- To determine turbidity and pH values , legislation from CANADA was considered.

TURBIDITY

The values measured in Units of Normal Turbidity (unt)

Values measured of minimum turbidity 19 and maximum 33 unt; where 80 unt is the reference value for CANADA legislation.

pH

Reference values: Between 7 and 8.7

All measured values are kept within these margins.

Latest sampling of water from 2013

REFERENCE VALUES			<45	80 *	7 - 8,7	<200	25/250*	1.5	0.1	1,3 - 2,2	1	<10	<0.1	<0.1	<5.0	<5.0	<0.005	<30		
LOCATION	T	TUR	pH	BOD	Odls	SS	CIA	SULF	NAM	NA	NIT	P	Cd	Pb	Zn	Cr	Hg	HTP		
SEWAGE BB- Main mouth right side	00512212	04/01/2013	7.9	23.8	25	<5	5.2	18	<0.01	<1	24.8	28	<0.05	2.4	<5	<10	<100	<5	<1	<1
Dumping by ExR229 opposite waste sewage	00512213	04/01/2013	8.5	27.7	13	<5	5.8	9	<0.01	<1	0.14	7	<0.05	0.4	<5	<10	<100	<5	<1	<1
ArroyoNapostáRuta252ladoNorte	00512214	04/01/2013	8.7	25.2	29	<5	8.1	17	<0.01	<1	<1	10	<0.05	0.4	<5	<10	<100	<5	<1	<1
Sewer channel Loma Paraguaya-Petrobrás/SMartin Street	00512215	04/01/2013	8.6	31.5	313	<5	7.3	219	<0.01	<1	0.15	14	<0.05	0.9	<5	<10	<100	<5	<1	<1
Saladillo Dulce affluent Road 3Km701.5	00512217	04/01/2013	9.1	30	629	<5	7.6	449	<0.01	<1	0.3	7	<0.05	0.9	<5	<10	<100	<5	<1	<1
End Club Almirante Brown	00512218	04/01/2013	8.6	27	15	<5	8.2	7	<0.01	<1	0.25	7	<0.05	0.2	<5	<10	<100	<5	<1	<1
ArroyoSauceChicoyRuta3	00512219	04/01/2013	8.2	25	67	<5	9.4	41	<0.01	<1	0.14	8	<0.05	0.5	<5	<10	<100	<5	<1	<1
MEGA-Mega East	00512119	22/04/2013	8.2	18.5	48	<5	7.8	12	<0.01	<1	4.8	9	<0.05	0.9	<5	<10	<100	<5	<1	<0.1
PUERTO ROSALES-PUERTO ROSALES	00512162	22/04/2013	8.3	17.2	32	<5	2.5	41	<0.01	<1	7.2	11	<0.05	1.1	<5	<10	<100	<5	<1	<0.1
PUERTO BELGRANO- Green beacons access breakwater	00512163	22/04/2013	8.4	17.9	15	<5	9.6	37	<0.01	<1	6	9	<0.05	1.2	<5	<10	<100	<5	<1	<0.1
Garbage dump D first sample Dredge 2012	00512164	22/04/2013	8.4	17.1	29	<5	9	21	<0.01	<1	4.7	9	<0.05	0.8	<5	<10	<100	<5	<1	<0.1
PUERTO BELGRANO- Between jetty A and C opposite	00512165	22/04/2013	8.4	17.9	5	<5	9.6	8	<0.01	<1	3.3	9	<0.05	0.7	<5	<10	<100	<5	<1	<0.1
West turning circle Galván close to beacon 4	00512495	22/04/2013	8.3	18.5	22	<5	7.9	18	<0.01	<1	6.6	9	<0.05	0.9	<5	<10	<100	<5	<1	<0.1
South beacon 5 opposite liquid bulk jetty1	00512496	22/04/2013	8.3	18.8	25	<5	7.9	19	<0.01	<1	5.9	10	<0.05	1.1	<5	<10	<100	<5	<1	<0.1
Liquid bulk jetty opposite Liquid bulk jetty 2	00512497	22/04/2013	8.3	18.6	27	<5	8.3	25	<0.01	<1	4.1	0.8	<0.05	0.9	<5	<10	<100	<5	<1	<0.1
Galván stream opposite Esso jetty	00512498	22/04/2013	8.3	18.8	83	<5	8	61	<0.01	<1	4.3	10	<0.05	0.9	<5	<10	<100	<5	<1	<0.1
Galván North end Berth 2	00512499	22/04/2013	8.3	18.5	81	<5	8	65	<0.01	<1	6.1	9	<0.05	0.9	<5	<10	<100	<5	<1	<0.1
PUERTOGALVAN-BERTH6	00512500	22/04/2013	8.3	18.5	12	<5	8	14	<0.01	<1	7.7	10	<0.05	1	<5	<10	<100	<5	<1	<0.1
Left bank between buoys 23 and 24	00512524	22/04/2013	8.4	17.6	19	<5	8.8	24	<0.01	<1	5.9	9	<0.05	1	<5	<10	<100	<5	<1	<0.1
North of Rata between By 26 and By 27	00512525	22/04/2013	8.3	18	12	<5	8.4	16	<0.01	<1	5.1	10	<0.05	1	<5	<10	<100	<5	<1	<0.1
Center buoys 26 and 27	00512526	22/04/2013	8.3	18	15	<5	8.3	16	<0.01	<1	7.1	11	<0.05	1.1	<5	<10	<100	<5	<1	<0.1
South exit Canal de la Vieja	00512527	22/04/2013	8.4	18	29	<5	9.1	21	<0.01	<1	5.7	13	<0.05	0.9	<5	<10	<100	<5	<1	<0.1
MAIN CHANNEL by Buoy 28-Variant 1-	00512528	22/04/2013	8.3	18	17	<5	8.2	15	<0.01	<1	5.9	9	<0.05	1.1	<5	<10	<100	<5	<1	<0.1
MAIN CHANNEL Beacon 30	00512529	22/04/2013	8.3	18	42	<5	7.9	33	<0.01	<1	6.1	10	<0.05	1.1	<5	<10	<100	<5	<1	<0.1
Canal de la Vieja - mouth of channel 550 South of sewage	00512530	22/04/2013	8.3	18	20	<5	7.9	22	<0.01	<1	6.2	10	<0.05	1.1	<5	<10	<100	<5	<1	<0.1
PIEDRABUENA Toepfer East behind	00512531	22/04/2013	8.3	19	34	<5	7.6	20	<0.01	<1	5.9	11	<0.05	0.9	<5	<10	<100	<5	<1	<0.1
South beacon 1 opposite liquid Toepfer new	00512532	22/04/2013	8.3	19	15	<5	7.9	18	<0.01	<1	6.7	11	<0.05	0.9	<5	<10	<100	<5	<1	<0.1
TOEPFER new center	00512533	22/04/2013	8.3	18	63	<5	7.7	26	<0.01	<1	6.8	10	<0.05	1	<5	<10	<100	<5	<1	<0.1
TERMINAL BBLANCA - BERTH 6	00512534	22/04/2013	8.3	18.7	16	<5	8	20	<0.01	<1	9	10	<0.05	1	<5	<10	<100	<5	<1	<0.1
TERMINAL BBLANCA-BERTH 9	00512535	22/04/2013	8.3	18	18	<5	7.7	18	<0.01	<1	5.8	10	<0.05	0.9	<5	<10	<100	<5	<1	<0.1
CARGILL - Cargill	00512536	22/04/2013	8.3	18	55	<5	7.8	27	<0.01	<1	6.4	11	<0.05	1.1	<5	<10	<100	<5	<1	<0.1
FISHERMEN HARBOR - Center still water	00512537	22/04/2013	8.3	19	14	<5	8.2	22	<0.01	<1	7	9	<0.05	1.2	<5	<10	<100	<5	<1	<0.1
MULTIPURPOSE - Berth 21 South	00512538	22/04/2013	8.3	18	32	<5	7.9	34	<0.01	<1	7.6	11	<0.05	0.9	<5	<10	<100	<5	<1	<0.1
Jetty Carranza Center still water	00512539	22/04/2013	8.3	18	17	<5	7.9	14	<0.01	<1	6.3	10	<0.05	1.1	<5	<10	<100	<5	<1	<0.1
South beacon 2 opposite Berth 21	00512540	22/04/2013	8.3	19	13	<5	8	17	<0.01	<1	6	11	<0.05	1.1	<5	<10	<100	<5	<1	<0.1
South beacon 5 opposite liquid bulk jetty1	00560047	27/06/2013	8.4	7.8	30	<5	10.9	16	<0.01	<1	<1	8	<0.05	1.4	<5	<10	<100	<5	<1	<1
West turning circle Galván close to beacon 4	00560048	27/06/2013	8.4	7.8	26	<5	10.9	14	<0.01	<1	<1	8	<0.05	1.6	<5	<10	<100	<5	<1	<1
South beacon 2 opposite Berth 21	00560049	27/06/2013	8.4	7.8	36	<5	11	17	<0.01	<1	<1	7	<0.05	1.5	<5	<10	<100	<5	<1	<1
South beacon 1 opposite liquid Toepfer new	00560050	27/06/2013	8.4	7.9	29	<5	11	18	<0.01	<1	<1	8	<0.05	1.3	<5	<10	<100	<5	<1	<1
MAIN CHANNEL Beacon 30	00560051	27/06/2013	8.4	7.5	38	<5	11.2	15	<0.01	<1	<1	16	<0.05	1.9	<5	<10	<100	<5	<1	<1
MAIN CHANNEL by Buoy 28-Variant 1-	00560052	27/06/2013	8.4	7.4	58	<5	11.4	19	<0.01	<1	<1	9	<0.05	1.6	<5	<10	<100	<5	<1	<1
Center buoys 26 and 27	00560053	27/06/2013	8.4	7.5	63	<5	11.4	18	<0.01	<1	<1	8	<0.05	2	<5	<10	<100	<5	<1	<1
Left bank between buoys 23 and 24	00560054	27/06/2013	8.4	8	78	<5	11.4	22	<0.01	<1	<1	11	<0.05	1.3	<5	<10	<100	<5	<1	<1
Garbage dump D first sample Dredge 2012	00560055	27/06/2013	8.4	8	90	<5	11.4	22	<0.01	<1	<1	9	<0.05	1.5	<5	<10	<100	<5	<1	<1
Liquid bulk jetty opposite Liquid bulk jetty 2	00512029	30/08/2013	8.7	10	23	<5	11.3	21	<0.01	<1	4.6	9	<0.05	0.8	<5	<10	<100	<5	<1	<0.1
South beacon 5 opposite liquid bulk jetty1	00560027	30/08/2013	8.7	9.6	26	<5	11.3	22	<0.01	<1	5.6	9	<0.05	1.2	<5	<10	<100	<5	<1	<0.1
West turning circle Galván close to beacon 4	00560028	30/08/2013	8.7	9.8	55	<5	11.3	25	<0.01	<1	5.9	9	<0.05	1.1	<5	<10	<100	<5	<1	<0.1
Galván north end Site 5	00560029	30/08/2013	8.7	10	14	<5	11.2	28	<0.01	<1	6.6	11	<0.05	1	<5	<10	<100	<5	<1	2.8
DREYFUS JETTY	00560030	30/08/2013	8.6	9.7	62	<5	11.2	16	<0.01	<1	4.1	9	<0.05	1.1	<5	<10	<100	<5	<1	<0.1
MEGA-Mega center	00560031	30/08/2013	8.6	9.5	53	<5	11.2	19	<0.01	<1	5.3	12	<0.05	1.1	<5	<10	<100	<5	<1	<0.1
PROFERTIL - Profertil Center	00560032	30/08/2013	8.6	9.4	53	<5	11.2	18	<0.01	<1	5.5	9	<0.05	0.9	<5	<10	<100	<5	<1	<0.1
South beacon 2 opposite Berth 21	00560033	30/08/2013	8.6	9.3	31	<5	11.2	17	<0.01	<1	4.9	10	<0.05	0.9	<5	<10	<100	<5	<1	<0.1
Multipurpose Berth 21 West	00560034	30/08/2013	8.6	9.3	57	<5	11.2	16	<0.01	<1	5.1	10	<0.05	0.9	<5	<10	<100	<5	<1	<0.1
Jetty Carranza Center still water	00560035	30/08/2013	8.6	9.4	20	<5	11.2	17	<0.01	<1	5.1	10	<0.05	1	<5	<10	<100	<5	<1	<0.1
FISHERMEN HARBOR - Center still water	00560036	30/08/2013	8.6	9.6	25	<5	11.2	18	<0.01	<1	4.9	15	<0.05	1.1	<5	<10	<100	<5	<1	<0.1
TERMINAL BBLANCA-BERTH 9	00560037	30/08/2013	8.6	9.4	88	<5	11.2	19	<0.01	<1	5.3	10	<0.05	1.1	<5	<10	<100	<5	<1	<0.1

TOEPFER new center	00560061	30/08/2013	8.6	9.4	68	<5	11.1	22	<0.01	<1	4.9	10	<0.05	1.1	<5	<10	<100	<5	<1	<0.1
South beacon 1 opposite liquid Toepfer new	00560062	30/08/2013	8.6	9.1	90	<5	11.3	14	<0.01	<1	4.9	10	<0.05	1.1	<5	<10	<100	<5	<1	<0.1
Vale South jetty	00560063	30/08/2013	8.6	9.5	25	<5	11	26	<0.01	<1	5.3	11	<0.05	0.9	<5	<10	<100	<5	<1	<0.1
MAIN CHANNEL Beacon 30	00560064	30/08/2013	8.6	8.8	56	<5	11.4	21	<0.01	<1	4.8	11	<0.05	1.1	<5	<10	<100	<5	<1	<0.1
MAIN CHANNEL by Buoy 28-Variant 1-	00560065	30/08/2013	8.3	8.7	50	<5	8.6	20	<0.01	<1	5.1	10	<0.05	0.9	<5	<10	<100	<5	<1	<0.1
PUERTO BELGRANO-BUOY 27	00560066	30/08/2013	8.6	8.6	44	<5	11.7	22	<0.01	<1	4.9	11	<0.05	1.2	<5	<10	<100	<5	<1	<0.1
Center buoys 26 and 27	00560067	30/08/2013	8.6	8.5	33	<5	11.6	18	<0.01	<1	5.2	9	<0.05	1.1	<5	<10	<100	<5	<1	<0.1
Left bank between buoys 23 and 24	00560068	30/08/2013	8.5	8.4	24	<5	11.7	22	<0.01	<1	5.2	11	<0.05	0.9	<5	<10	<100	<5	<1	<0.1
PUERTO ROSALES Interior channel center	00560069	30/08/2013	8.5	9.2	12	<5	11.9	15	<0.01	<1	5.1	8	<0.05	1	<5	<10	<100	<5	<1	<0.1
PUERTO BELGRANO - Access channel	00560070	30/08/2013	8.6	9.1	11	<5	11.8	18	<0.01	<1	4.8	10	<0.05	1.1	<5	<10	<100	<5	<1	<0.1
PUERTO BELGRANO- Between jetty A and C opposite	00560071	30/08/2013	8.6	12	12	<5	11.6	16	<0.01	<1	5.3	10	<0.05	1.1	<5	<10	<100	<5	<1	0.9
MAIN CHANNEL Center Beacon 20 and 21 Garbage dump	00560072	30/08/2013	8.5	8.9	19	<5	11.8	19	<0.01	<1	4.6	10	<0.05	1.1	<5	<10	<100	<5	<1	<0.1

NOMENCLATURE

All values are stated in mg/l

T	TEMPERATURE [°C]	SS	SUSP SOLIDS	P	PHOSPHORUS	Hg	MERCURY
TUR	TURBIDITY [unt]	CIA	CYANIDES	Cd	CADMIUM	HTP	HYDROCAR
pH	HYDROG POTENTIAL [upH]	SULF	SULPHURS	Pb	LEAD	S/D	No data
BOD	Biochemical Oxygen Demand	N AM	AMMON.NITROGEN	Zn	ZINC	NIT	NITRITES
Od	DISSOLVED OXYGEN	NA	NITRATES	Cr	CHROMIUM		

3.3 - ENVIRONMENTAL IMPACT STUDIES FOR DREDGING ACTIVITIES

For the tasks to maintain the depth of the access channel and Bahía Blanca ports, the corresponding Environmental Impact Assessment has been made, approved by Decision OPDS 168/02, which declares *environmentally fit the dredging maintenance tasks with the trailing suction, water injection and cutting methodologies, and which also ratifies the dumping sites selected for the trailing suction methodology.*

Decision OPDS 168/02 states the environmental accomplishment actions required to maintain the Environmental Declaration in force. The most important is the Environmental Monitoring Plan (described in 3.2).

EVIDENCE OF ACCOMPLISHMENT: Protocol and Certificate of the Custody Chain of the OPDS

4 - COORDINATION OF NATIONAL CONTINGENCY PLAN (PLANACON), EMERGENCIES DUE TO SPILLS IN THE ESTUARY

All the Sites that operate with international flag ships and those for service vessels have emergency plans for spills in the estuary.

The CGPBB controls the full observance of these actions, checking the active plans ratified by the PNA, in all the companies in its jurisdiction.

The contingency plans, consist of action strategies, deployment of people and specific equipment (vessels, containment booms, recovery equipment) that should be made available in case of emergency situations.

The legal rules are set by National Act 22190 and Ordinance PNA 08/98 (it regulates the plan formats and generates their approval).

EVIDENCE OF ACCOMPLISHMENT: Copy of certificate ratified by PNA

5. CONCESSIONAL INDUSTRIAL ENTERPRISES

ENVIRONMENTAL AUTHORIZATION CONTROL

Observing Dec. 1749/96, the CGPBB as Port Authority, must determine zones in the areas to be occupied by industrial projects.

Also, the CGPBB, requires these companies to observe the provisions in Act No. 11459 (Industrial Settlement) as regards the issuance of the Environmental Fitness Certificate, after evaluation of the Environmental Impact Assessment.

The companies that are required this are:

- Cargill SA
- Profertil SA
- CÍA MEGA SA
- PBB Polisor (floating barge)
- Potasio Rio Colorado SA
- YPF LNG regasification

EVIDENCE OF ACCOMPLISHMENT: Environmental fitness certificates issued by the corresponding Environmental Authority

Legal framework - Province of Buenos Aires

Act Number 11459 on industrial settlement

Section 1 – This act will be applicable to all industries installed or to be installed or that expand or modify their facilities in the jurisdiction of the Province of Buenos Aires.

Section 2 – For the purpose of this act, industrial facility is any facility where a process is performed to preserve, repair or transform the shape, essence, quality or quantity of any raw material or material to obtain a final product by means of industrial methods.

Section 3 – All industrial facilities should have the corresponding Environmental Fitness Certificate as indispensable compulsory requirement for the municipal authorities to grant, by virtue of their legal powers, the corresponding industrial authorizations. The Environmental Fitness Certificate will be issued by the Enforcement Authority in the cases of facilities classified as Third Category by Section 15, while, for first and second category, it will be issued by Municipality.

Decree Number 1749/96

Section 10 – Base forms for the categorization of industries (Annex 3 hereto) will be delivered by the municipalities or the Port Authority in charge of the jurisdiction where the facility to be categorized is or will be established. Once filled in by the interested party and signed by the representative or attorney of the company, it will be received by the municipality or Port Authority without further requirements, it will certify the establishment area of the facility, as set forth in Decree-Act 8912/77 (of Territory organization and soil use) and in these rules, and will send the documents to the Enforcement Authority, titled as a file and within ten (10) days.

Section 11 – The Enforcement Authority will be in charge of categorizing the enterprises within twenty (20) days, after the reception of the documents from the Municipality or the Port Authority. The Enforcement Authority will submit to the Ministry of Production and Employment of the Province of Buenos Aires a list of the industrial facilities categorized in the Buenos Aires Province territory for its information.

6. NON INDUSTRIAL CONCESSIONAL ENTERPRISES - ENVIRONMENTAL AUTHORIZATION CONTROL

Observing Dec. 1749/96, the CGPBB as Port Authority, must determine zones in the areas to be occupied by industrial projects. Also, the CGPBB requires the companies that store, sort, condition and preserve grains, regulated by Act 12605, to obtain the Environmental Declaration that supports their activities.

For this type of enterprises, the CGPBB has a valid agreement entered into with the Provincial Environmental Authority (see Mutual Aid Agreement). This agreement provides the direct collaboration of CGPBB Safety and Environment professionals with the OPDS in the surveying tasks of grain facilities.

The companies under this rule are:

- Toepfer International Argentina SRL
- Terminal Bahía Blanca SA
- Oleaginoso Moreno Hnos. SA
- Louis Dreyfus Commodities SA

EVIDENCE OF ACCOMPLISHMENT: OPDS inspection record

Cooperation, Mutual Aid and Competition definition agreement

CONVENIO DE COOPERACION, ASISTENCIA RECIPROCA Y DESLINDE DE COMPETENCIA EN LA ZONA PORTUARIA

En la ciudad de Bahía Blanca, a los 17 días del mes de Mayo de 2003, entre el CONSORCIO DE GESTION DEL PUERTO DE BAHIA BLANCA, representado en este acto por el Lic. JORGE O. SCOCCIA, Presidente del Ente mencionado y el Sr. JORGE FRAPOLLI, en su carácter de Director Secretario del mismo, en adelante "El Consorcio", con domicilio en la Avda. Mario Guldo s/n Muelle Ministro Roque Carranza Puerto Ingeniero White del Partido de Bahía Blanca, y por la otra parte el MINISTERIO DE ASUNTOS AGRARIOS Y PRODUCCIÓN DE LA PROVINCIA DE BUENOS AIRES, representado en este acto por el Sr. Ministro Ing. RAFAEL MAGNANINI, en adelante "El Ministerio", con domicilio en calle 12 esq.54 Torre Administrativa II de la ciudad de La Plata, acuerdan celebrar el presente Convenio de Cooperación, Asistencia Recíproca y Deslinde de Competencia en la Zona Portuaria, sujeto a las siguientes cláusulas:

PRIMERA: En razón de su competencia territorial en la zona portuaria, por ser territorio provincial, dada por la Ley 11.474 y en cumplimiento de la normativa vigente, Ley 12.605 "Establecimientos dedicados exclusivamente a la actividad de almacenamiento, clasificación, acondicionamiento y conservación de granos", "El Consorcio" se compromete a:

- Colaborar con la Subsecretaría de Política Ambiental de la Provincia de Buenos Aires, autoridad de aplicación de la Ley 12.605 de acuerdo a lo establecido por Decreto n°2.182/01, en todo lo concerniente a la citada Ley en aquellos establecimientos ubicados en la zona portuaria;
- Aportar el equipamiento técnico descrito en el Anexo I con el alcance que allí se describe;
- Recibir toda la documentación que deban presentar los establecimientos para el cumplimiento de la mencionada legislación, remitiendo la misma a la Subsecretaría mencionada;
- Comunicar a los interesados cuando recibieren la respuesta de la Subsecretaría, sobre lo concerniente a la documentación remitida;
- Realizar en forma coordinada con la Subsecretaría, la fiscalización de la zona, e informar a ésta cuando se hubiera detectado alguna transgresión de los establecimientos a la normativa ambiental.

SEGUNDA: Por su parte y en cumplimiento de la normativa vigente, Ley 12.605, Decreto-Ley n°5965/58 y su reglamentación por Decreto n°3395/96 en lo concerniente a la protección del cuerpo receptor atmósfera por descarga de efluentes gaseosos, Ley 11.723 "Del Medio Ambiente", Ley 11.720 y su reglamentación por Decreto n°806/97 "De Residuos Especiales", "El Ministerio" a través de la Subsecretaría de Política Ambiental se compromete a:

- Estudiar la documentación enviada por "El Consorcio" a fin de emitir los certificados que correspondan en legal tiempo y forma;
- Fiscalizar de oficio, las Industrias Instaladas en la zona portuaria, en forma coordinada con "El Consorcio", cuando lo estime necesario.


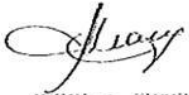
TERCERA: Detectadas las infracciones a la normativa vigente, su juzgamiento tramitará por ante la Subsecretaría de Política Ambiental de conformidad a las normas en vigencia.

CUARTA: El presente Convenio será comunicado a sus efectos a la Dirección Provincial de Actividades Portuarias.

En prueba de conformidad se firman tres (3) ejemplares de un mismo tenor, a un solo efecto en el lugar y fecha arriba indicadas.

ANEXO 1

- A los efectos de cumplimentar lo estipulado en la cláusula primera inciso b) "El Consorcio" pondrá a disposición de la Subsecretaría de Política Ambiental el equipamiento que se dispone actualmente y se describe a continuación:
 - Un (1) medidor Nivel de Sonido Integrador de Impulso, marca Quest Technologies, modelo 2800, con calibrador de sonido QC-10 y QC-20, marca Quest Technologies.
 - Bomba Portátil Manual ACCURO, marca Dräger.
 - Bomba Automática 2000 ACCURO, marca Dräger.
 - Monitor Portátil de Gases Tóxicos con Sensores Intercambiables, marca Dräger.
 - Cámara Fotográfica, equipo filmadora, anemómetro portátil.
- Para la operación de los equipos mencionados "El Consorcio" facilitará personal para su uso.
- Los equipos estarán bajo la guarda de "El Consorcio", quien los pondrá a disposición de la Subsecretaría de Política Ambiental toda vez que esta los requiera.

 
JURISDICCION SCOCCIA
PRESIDENTE
SECRETARIO

7. INDUSTRIAL CONCESSIONAL ENTERPRISES

FOLLOW UP OF ENVIRONMENTAL MONITORING PLANS

As annex to the Environmental Fitness Certificate (CAA - Act No. 11.459 – Dec. 1741/96), there are provisions supported by the OPDS that describe the Environmental Monitoring Plans, so that different parameters check their concentration values against the existing rules.

The role of the CGPBB, in this context, is to make sure that the companies duly perform all the OPDS requirements in the environmental monitoring plan.

This task requires the CGPBB Safety and Environment area to require all licensees, every six months, the results obtained with the corresponding sampling protocols and laboratory analysis, observation and further field inspection (if required). The companies included are:

- Cargill SA
- Profertil SA
- CÍA MEGA SA
- PBB Polisor (floating barge)
- Potasio Rio Colorado SA
- YPF LNG regasification

EVIDENCE OF ACCOMPLISHMENT: Protocols and Certificates of the Custody Chain

8. PROVISION OF PERSONAL PROTECTION EQUIPMENT TO PORT WORKERS

The CGPBB contributes to improving the general conditions of the working environment of third parties' personnel, activating annually the program to survey clothing and personal protection equipment requirements of stevedores, cargo clerks, winch operators, foremen, watchmen and receivers.

EVIDENCE OF ACCOMPLISHMENT: Bill of delivery of PPE to trade unions

9. ACCIDENT ANALYSIS OF THE BAHÍA BLANCA PORT

In order to assess measures to prevent accidents, the Safety and Environment Area of the CGPBB performs an analysis of the work accidents that may occur to port personnel.

This statistics, which is closed the latest day of the annual cycle, is also submitted to the Chamber that includes the companies contracting the employees (who are temporary workers).

EVIDENCE OF ACCOMPLISHMENT: Annual statistics

SAFETY RULES FOR CGPBB IMPLEMENTATION OF OHSAS 18001: 2007

As Port Authority in charge of the Administration and Operation of the Bahía Blanca Port Complex, in 2008, the CGPBB implemented the Occupational Safety and Health Management System, OHSAS 18001.

This system, based on the Safety Policy approved by the company's management, allowed the Safety and Environment area to ratify the following procedures.

OCCUPATIONAL HEALTH AND SAFETY PROCEDURES

DOCUMENT CODE	DOCUMENT TITLE	REVISIONS					
		Nº	DATE	Nº	DATE	Nº	DATE
	Política de Seguridad y Salud Ocupacional	0	14/06/07				
	Manual de Seguridad y Salud Ocupacional	0	26/09/07				
P SySO 03 - 01	Planificación para la identificación de peligros, evaluación de riesgos y control	0	26/09/07				
R1 - P SySO 03-01	"Registro de peligros y riesgos" (formato electrónico)	0	26/09/07				
R2 - P SySO 03-01	"Cuestionario de peligros"	0	26/09/07				
R3 - P SySO 03-01	"Identificación de peligros"	0	26/09/07				
R4 - P SySO 03-01	"Documento de inicio de tareas"	0	26/09/07				
R5 - P SySO 03-01	"Comunicación de peligros"	0	26/09/07				
P SySO 03 - 02	Requisitos legales y de otra índole	0	26/09/07				
R1 - P SySO 03-02	"Índice de requisitos legales"	0	26/09/07				
R2 - P SySO 03-02	"Índice de requisitos de otra índole"	0	26/09/07				
R - Objetivos	Objetivos	0	26/09/07				
P SySO 04 - 01	Estructura y responsabilidad	0	26/09/07				
P SySO 04 - 02	Formación, toma de conciencia y competencia	0	26/09/07				
R1 - P SySO 04-02	"Programa de capacitación"	0	26/09/07				
R2 - P SySO 04-02	"Registro de Capacitación"	0	26/09/07				
P SySO 04 - 03	Consulta y comunicación	0	26/09/07				
P SySO 04 - 05	Control de documentos y datos	0	26/09/07				
R1 - P SySO 04-05	"Lista maestra de documentos"	0	26/09/07				
R2 - P SySO 04-05	"Lista de distribución de documentos"	0	26/09/07				
R3 - P SySO 04-05	"Constancia de entrega de documentos"	0	26/09/07				
R4 - P SySO 04-05	"Entrega Manual de Seguridad"	0	26/09/07				
P SySO 04 - 06	Control operacional	0	26/09/07				
R1 - P SySO 04-06	"Control de maldatos y alarmas hombre al agua"	0	26/09/07				
R2 - P SySO 04-06	"Manteneos"	0	26/09/07				
R3 - P SySO 04-06	"botiquín y kit confinamiento"	0	26/09/07				
R4 - P SySO 04-06	"Iluminación de emergencia"	0	26/09/07				
R5 - P SySO 04-06	"seguros contratistas" (formato electrónico)	0	26/09/07				
P SySO 04 - 07	Preparación y respuesta ante emergencias	0	26/09/07				
Anexo I P SySO 04 - 07	Plan de emergencia	0	26/09/07				
P SySO 05 - 01	Mediciones y seguimiento del desempeño	0	26/09/07				
R1 - P SySO 05-01	"Informe de comité de seguridad"	0	26/09/07				
P SySO 05 - 02	Accidentes, incidentes, no conformidad, acciones correctivas y preventivas	0	26/09/07				
R1 - P SySO 05-02	"Informe de accidentes / incidentes"	0	26/09/07				
R2 - P SySO 05-02	"Tratamiento de no conformidades"	0	26/09/07				
P SySO 05 - 03	Registros y gestión de los registros	0	26/09/07				
R1 - P SySO 05-03	"Índice de Registros"	0	26/09/07				
P SySO 05 - 04	Auditorías internas	0	26/09/07				
R1 - P SySO 05-04	"Programa de auditorías internas"	0	26/09/07				
R2 - P SySO 05-04	"Informe de Auditoría"	0	26/09/07				

OCCUPATIONAL SAFETY AND HEALTH POLICY

The **Consortio de Gestión del Puerto de Bahía Blanca**, according to its policy, performs its activity and business protecting the Occupational Safety and Health of its employees, contractors and people in general. The company will make its best effort to prevent accidents, injuries and occupational illnesses through the active participation of all its personnel at every level, planning tasks and acting always preventively.

Our goal is to perform work activities under maximum reliability conditions. This requires the development and maintenance of a true environmental safety and care culture committed to continuous improvement.

For this purpose the company commits to:

- Implement a documented Occupational safety and health management system that will be communicated to all people included in its scope, providing the financial and human resources required to develop the plans and programs established. The Management system will be reviewed periodically to keep it valid and updated throughout time.
- Set up an inquiry and communication system with the personnel and the contractors to train them in the risk prevention techniques to raise safe performance awareness at work and out of work.
- Respond quickly and efficiently to emergencies or accidents resulting from operations, cooperating with related organizations and competent authorities in the topic.
- Meet every legal provision, applicable regulation and private codes it adheres to.

Eng. Valentín Morán
General Manager
C.G.P.B.B.

EVIDENCE OF ACCOMPLISHMENT: Certificate updated annually

10. ENVIRONMENTAL IMPACT ASSESSMENT IN PORT WORKS

For every work to be performed in the jurisdiction of the Port of Bahía Blanca, either directly by the Port Authority or by licensees and/or permit holders, which may result in measurable alterations in the environment, an Environmental Impact Assessment should be submitted, following the guidelines in Act Number 11459 (industrial projects) or Act 11723 (large works). This document, assessed by different technical areas of the Consorcio de Gestión is deemed essential to decide the feasibility of the project and/or work execution. If applicable, the document is submitted to the corresponding environmental authority. If the work or project under analysis is included in the above mentioned rules, the corresponding environmental fitness certification should be obtained. This is an indispensable condition to perform the projects and/or works.

The projects analyzed under this point of view correspond to:

- Expansion of industrial facilities
- Generation of energies
- Dredging operations
- Construction of jetties
- Construction of cells and/or storage facilities
- New industrial facilities

The format of the studies should include:

- Environmental description of the area of installation or execution of the work.
- Project description.
- Impact identification and quantification.
- Definition of mitigation measures.
- Monitoring plan
- Contingency plan

EVIDENCE OF ACCOMPLISHMENT: Documents analyzed

11. RISK ANALYSIS IN PORT PROJECTS

Same as the Environmental Impact Assessment, the Risk Analysis is a document required to make decisions easier about projects feasibility. It should be considered that there is no applicable legal framework, however, the Consorcio de Gestión sets its own requirement. Risk analysis should include:

- Identification of hazards that the project and/or work may generate.
- Identification of accidents that may result from the hazards stated.
- Identification of the consequences of accidents.

- Identification of the negative effects that the project may generate in the neighboring facilities according to an analysis of safety distances and accidents identified.
- Surveying of hazardous products with storage identification
- In this report, the safety preventive measures to be implemented must be technically justified, to minimize the consequences described.

EVIDENCE OF ACCOMPLISHMENT: Documents analyzed

12. TREATMENT OF VECTORS IN THE PORT AREA

RAT EXTERMINATION

In order to improve hygiene in different work environments, the Safety and Environment Sector of the CGPBB develops annually the vector treatment and disinfection program in different port areas. All the tasks to be performed by the company assigned are coordinated and supervised by personnel from the Safety and Environment Area of the CGPBB. The company assigned should meet the following requirements:

- Provincial permit issued by the Ministry of Production of the Province of Buenos Aires.
- Permit from the Department of Environmental Sanitation of the Municipality of Bahía Blanca.
- Authorization of the Technical Director of the company issued by the Ministry of Production of the province of Buenos Aires.

The campaigns are made every twelve (12) months and with a minimum frequency of one weekly visit, where control tasks are performed, baits are replaced and dead rodents are taken away. The products used should be authorized by the Secretary of Public Health of the Municipality of Bahía Blanca. The amount of baits installed is two hundred and fifty (250), distributed as shown in the pictures.



ANNUAL ANTI-RAT CAMPAIGN - INGENIERO WHITE

1. Fishermen harbor
2. Naval station of Prefectura Naval Argentina.
3. Access area to ex Iron Jetty
4. Foremen office yard
5. Cargill - TBB limit sector
6. Puerto Ingeniero White scales sector
7. Ministro Carranza Berth basement
8. Stowage contracting center perimeter
9. CGPBB personnel car parking area
10. Guard post PNA No. 5
11. Square (boulevard) Avda. Mario Guido
12. Puerto Galván, scales and Berths 6/7 closing area Pto. Galván



ANNUAL ANTI-RAT CAMPAIGN - PUERTO GALVÁN

DISINSECTIZATION

ANNUAL DESINSECTIZATION CAMPAIGN - ING. WHITE



With the focus on hygiene, the Safety and Environment area of the CGPBB has a service contracted to minimize the proliferation of larvae and to reduce the number of adult insects. These prevention campaigns against flies, mosquitoes and larvae inside the Ingeniero White port area (see picture) are performed during five (5) months, with a minimum frequency of two (2) fumigations per week, along every internal street and weed and planted areas.

The products to be used - insecticides for adults (Pyrethroids) and larvae (BTI) with residual power- are authorized by the Secretary of Public Health.

The company assigned should meet the following requirements:

- Provincial permit issued by the Ministry of Production of the Province of Buenos Aires.
- Permit from the Department of Environmental Sanitation of the Municipality of Bahía Blanca.
- Authorization of the Technical Director of the company issued by the Ministry of Production of the province of Buenos Aires.

13. SURVEY OF PORT FACILITIES

SyMA's staff goes through the different port areas according to specific control guidelines:

- LICENSEE'S SURVEYING - The spaces licensed under a use permit are audited, checking the observance of Act 19.587 and Dec. 351/79. Based on the observations made, optimization plans are set that require an accomplishment follow up.

Area: Safety and Environment

- INTERPHASE SURVEYING - Staff from the PBIP access control service goes through the restricted area jetties to survey and report abnormal conditions detected. The information is received by the protection officer, who forwards the response action according to the work area involved (maintenance, cleaning, etc.)
- COMMON AREAS SURVEY - The surveys of common areas are made periodically. Any observation is recorded in internal communications, detailing findings and the recommended action.
- SURVEYS OF CEREAL COMPANIES - These audits are performed according to item 6 herein.
- SURVEYS OF INDUSTRIES - These audits are performed according to item 7 herein.

EVIDENCES OF ACCOMPLISHMENT

Copy of audit evidence.

Guard reports.

Chain of observation via email and checklist

Inspection records.

Monitoring plans

14. Monitoring of settleable particulate material

The Safety and Environment Area of the CGPBB, as ordered by the Cooperation, Mutual Aid and Competition definition agreement agreed on and entered into by the CGPBB and the Organismo Provincial de Desarrollo Sostenible (OPDS, Ex SPA), has contracted the services of laboratories to take samples and make analysis of airborne particulate material.

These controls have been performed since 2007 and include thirteen (13) sampling points in areas inside and outside the port jurisdiction (see picture).

SERVICE CONTRACTING FOR SAMPLING AIR QUALITY WITH MEASUREMENT OF SETTLEABLE PARTICULATE MATERIAL PARAMETERS AGREEMENT CGPBB- OPDS ACT 12605

1. SCOPE OF THE STUDY

This contract aims at metering Settleable Particulate Material at different sites, inside and outside the port jurisdiction, and under the Cooperation, Mutual Aid and Competition definition agreement agreed on and entered into by the Consorcio de Gestión del Puerto de Bahía Blanca and the Organismo Provincial de Desarrollo Sostenible (Ex SPA).

2. CHARACTERISTICS OF THE SERVICES TO BE RENDERED

2.1- MEASUREMENT OF SETTLEABLE PARTICULATE MATERIAL (air quality)

- **Standard to be observed for measurement:** ASTM D1739-70
- **Measurement period:** Twelve (12) months after signing the agreement.
- **Start of measurements:** XXXXX
- **Sampling frequency:** Every 30 days

- **Report submission frequency:** Monthly
- **Content of reports to be prepared for submission to the CGPBB:**
 - a. In OPDS protocol (Dec. 504/01) state recorded values for each sample/collector.
 - b. In OPDS protocol (Dec. 504/01), identify value measured (mg/cm²) and the percentage (%) corresponding to the organic and inorganic composition for each of the samples collected.
 - c. Include in a separate report the meteorological data of the month measured, such as wind speed and direction and rainfall (data provided by the VTS service of the CGPBB).
- **Location of collectors:** See Diagram attached.
- **Number of collectors to be located:** Nine (9) collectors (see location in diagram attached).
- Identify the collectors individually for a better observation of the reports submitted.
- Submit the reports by Protocol and Custody Chain Certificates in duplicate.
- Deliver the results in electronic copy by email (monthly) and in CD (after 12 months).

3. THE SERVICE PROVIDER WILL HAVE TO:

- State in the proposal to be submitted the elements available in the laboratory for the corresponding analysis (scales, type of samplers, etc.)
- Perform the analysis according to the guidelines in Decision Number 504/01 of the Subsecretary of Environmental Policy of the Province of Buenos Aires (today OPDS).
- Deliver the results in reports that meet the requirements of the above mentioned Decision.
- In addition to the provisions in Dec. Number 504/01, it should not disclose to third parties and should keep in strict confidentiality the following:
 - a) All technical information originated at the CGPBB.
 - b) The reports with the results obtained in the contracted works.
 - c) Make no technical or scientific publication and/or presentation where these are mentioned or included, except written express prior authorization by the CGPBB.

4. DELIVERY TIME OF THE ANALYSIS RESULTS

- 15 running days as from the sampling dates.
- Coordinate sampling with the CGPBB, Safety and Environment area.



LOCATION OF PARTICULATE MATERIAL SAMPLERS

- 1 Cargill Malting plant Over fence facing traffic circle V Sarsfield
- 2 Cargill Oil plant Over fence facing gas cabin
- 3 Berth 17 By Access gate
- 4 CGPBB Garage Over fence facing the restaurant
- 5 CGPBB Berths 1-2-3-4 Over access fence
- 6 TOEPFER Over fence at Pump Room
- 7 CARGILL Malting Plant II Over fence in Avenente
- 8 CGPBB Puerto Galván Over fence by guard
- 9 FIREMEN, I. White Terrace of building on Mascarello 3845
- 10 Fishermen club (Galván)
- 11 DREYFUS (Galván)
- 12 MEGA Opposite Dreyfus truck exit
- 13 MEGA Opposite Dreyfus jetty

Sampling frequency is every 30 days and report submission frequency is monthly.

The results are compared to Act 5965, Dec. 3390/95, are distributed to the different grain companies in the port and to the enforcement authority to join work plans and minimize the impacts detected.

REGION	Port Of Ingeniero White												Town of Ing. White						
	P1 - turning circle V S			P2 - Cargill Oil company			P3 - Public Promenade			P6 - Toepfer			P7 - Port Limit			P9 - Firemen Ing. W			
	VM	ORG 1	ORG 2	VM	ORG 1	ORG 2	VM	ORG 1	ORG 2	VM	ORG 1	ORG 2	VM	ORG 1	ORG 2	VM	ORG 1	ORG 2	PM 10- µg/m ³
DATE	[mg/cm2]	[%]	[mg/cm2]	[%]	[mg/cm2]	[%]	[mg/cm2]	[%]	[mg/cm2]	[%]	[mg/cm2]	[%]	[mg/cm2]	[%]	[mg/cm2]	[%]	[mg/cm2]	[%]	
17/01/2012	1.103	0.624	56.573	2.103	0.899	42.748	1.004	0.587	58.466	2.672	1524	57.036	2.345	1.423	60.682	0.998	0.623	62.425	
22/02/2012	1.250	0.660	52.800	2.320	1.032	44.483	1.404	0.716	50.997	2.245	1.145	51.002	2.245	1.297	57.773	1.254	0.716	57.097	
22/03/2012	1.110	0.638	57.477	2.202	0.924	41.962	1.235	0.754	61.053	1.861	1.121	60.236	2.223	1.138	51.192	0.983	0.623	63.377	
24/04/2012	1.287	0.647	50.272	1.725	0.875	50.725	1.109	0.599	54.013	2.001	1.319	65.917	1.947	1.007	51.721	1.111	0.654	58.866	
23/05/2012	1.432	0.754	52.654	1.612	0.842	52.233	1.435	0.742	51.707	2.331	1.159	49.721	0.998	0.543	54.409	1.431	0.785	54.857	
19/06/2012	1.587	0.852	53.686	1.342	0.689	51.341	1.239	0.654	52.785	2.015	1.031	51.166	1.328	0.706	53.163	1.121	0.647	57.716	
24/07/2012	1.133	0.577	50.927	1.526	0.775	50.786	0.968	0.563	58.161	1.458	0.787	53.978	1.005	0.615	61.194	1.315	0.683	51.939	
23/08/2012	1.677	0.812	48.420	1.501	0.689	45.903	1.340	0.715	53.358	2.149	1.126	52.396	1.519	0.775	51.020	1.166	0.655	56.175	
20/09/2012	1.731	0.834	48.180	1.312	0.685	52.210	1.625	0.874	53.785	1.813	1.079	59.515	1.138	0.693	60.896	0.881	0.624	70.829	
09/10/2012	1.271	0.791	62.234	1.523	0.793	52.068	2.382	1.273	53.442	2.377	1.241	52.209	1.638	0.931	56.838	1.987	1.213	61.047	
21/11/2012	1.324	0.814	61.480	1.523	1.110	72.882	2.613	1.736	66.437	1.932	0.931	48.188	1.545	0.832	53.851	1.347	1.037	76.986	
20/12/2012	1.936	1.126	58.161	2.184	1.123	51.419	3.241	1.542	47.578	2.136	1.794	83.989	1.444	0.693	47.992	1.917	1.125	58.685	
17/01/2013	2.371	1.321	55.715	3.222	1.697	52.669	3.127	1.714	54.813	3.124	2.475	79.225	1.037	0.625	60.270	2.128	1.282	60.244	
18/02/2013	1.295	0.714	55.135	4.872	2.493	51.170	2.255	1.111	49.268	2.136	1.794	83.989	1.428	0.846	59.244	2.668	1.449	54.310	
14/03/2013	1.832	0.991	54.094	2.223	1.341	60.324	3.005	1.537	51.148	4.227	2.936	69.458	0.846	0.514	60.757	1.938	1.003	51.754	
09/04/2013	1.738	0.864	49.712	1.921	0.841	43.779	2.318	1.261	54.400	1.937	1.222	63.087	1.327	0.743	55.991	2.136	1.427	66.807	
16/05/2013	1.913	1.063	55.567	2.230	1.159	51.973	1.938	1.183	61.042	2.225	1.579	70.966	1.038	0.571	55.010	2.002	1.422	71.029	
18/06/2013	2.008	1.024	50.996	1.838	0.919	50.000	1.721	0.861	50.029	1.937	1.357	70.057	1.212	0.606	50.000	1.638	1.146	69.963	
23/07/2013	1.127	0.608	53.949	1.733	0.763	44.028	2.981	1.609	53.975	1.832	1.080	58.952	1.314	0.749	57.002	1.729	1.124	65.009	
21/08/2013	2.003	1.061	52.971	2.121	1.082	51.014	1.685	0.927	55.015	2.030	1.339	65.961	0.971	0.544	56.025	SD	SD	SD	
18/09/2013	1.846	0.867	46.966	2.032	0.833	40.994	1.296	0.557	42.978	2.111	0.675	31.975	1.002	0.270	26.946	SD	SD	SD	
18/10/2013	1.226	0.515	42.007	1.318	0.553	41.958	1.133	0.453	39.982	1.938	0.852	43.963	0.883	0.264	29.898	SD	SD	SD	
20/11/2013	1.122	0.527	46.970	1.626	0.068	4.182	1.933	0.773	39.990	SD	SD	SD	1.101	0.352	31.971	SD	SD	SD	
13/11/2013	1.930	1.062	55.026	2.030	1.339	65.961	1.937	1.222	63.087	1.901	0.821	43.188	1.830	0.990	54.098	SD	SD	SD	
28/03/2014	0.924	0.638	69.048	1.015	0.451	44.433	0.765	0.323	42.222	2.218	1.205	54.328							
29/04/2014	0.564	0.296	52.482	1.082	0.535	49.445	0.966	0.423	43.789	1.927	0.919	47.691							

Limit value regulated by ACT 5965 (Dec. 3395/96, Table C) = 1mg/cm2

EVIDENCE OF ACCOMPLISHMENT: Protocol and Certificate of the Custody Chain according to Dec. OPDS 504/01
16. INDUSTRIAL EFFLUENT CONTROL

Every six (6) months, a monitoring program is carried out in the estuary effluents, to assess the environmental behavior of the industrial facilities and to see if those liquid effluents could impact adversely the dredging tasks (modification of sediments). For this task, local laboratories are hired. They take samples of liquids and perform the corresponding laboratory measurements checking the observance of decision number 336/03 (limits for discharge into open sea). The companies where effluent quality measurements are made are:

- Cargill SA
- Profertil SA
- CIA MEGA SA

- Municipality of Bahía Blanca sewage
- PBBPolisur
- Petrobras
- Petrochemical complex common channel
- ESSO channel

ANNEX II-Decision No. 336/03 - Limits for discharging into open sea			≤0.005	NE	NE	≤5,0	≤0,1	≤2,0	≤5,0	≤2,0	≤0,1	≤30	≤105	≤75	≤30	≤500	≤200
COMPANY	DATE	LOCATION	Hg	Cr VI	Cr	Zn	Cd	Cu	Al	Ba	Pb	Hc.Tot. of Pet	Nitrogen		COD	BOD5	

EVIDENCE OF ACCOMPLISHMENT: Protocol and Certificate of the Custody Chain according to Dec. OPDS 504/01

17. Natural and non industrial anthropogenic affluent control to the estuary of Bahía Blanca

Different natural affluents are surveyed that discharge their waters into the Bahía Blanca estuary, to measure the concentration of diverse analytes in order to check the quality of the waters discharged naturally into the estuary. The sampling areas are:

- Sauce Chico stream and Road 3.
- Saladillo Dulce affluent (Road 3 South, Km 701).
- End Club Almirante Brown.
- Loma Paraguaya drainage channel – Petrobrás w/San Martín Street.
- Southeast inner basin
- Petrochemical complex discharge sewage.
- Napostá stream and Ruta 252 North Side.
- Dumping area by former R 229 (opposite waste sewer).
- Sewage Bahía Blanca (main discharge right side).
- Natural channel exit Sewage
- Dumping area third sewage basin.

EVIDENCE OF ACCOMPLISHMENT: Protocol and Certificate of the Custody Chain according to Dec. OPDS 504/01

18. Safety and Environment report for the Board of Directors

From the Safety and Environment Area, and to keep the Consorcio de Gestión Board informed, a periodic summary is submitted with the sector activities. The tasks corresponding to the period assessed are included.

Next, the summary report 2013 is transcribed.

AUDIT ACTIVITY CLOSING REPORT YEAR 2013

1. ENVIRONMENTAL AUDITS

In addition to the environmental surveys and audits in port jurisdiction to check legal and environmental requirements, the detail of the audits performed together with Sanitation of Borders is added, to verify campaigns of pest, vector and rodent proliferation control in land and facilities within the CGPBB jurisdiction area.

Moreno	15/02/2013	OPDS - CCostanzo
Dreyfus	19/02/2013	OPDS - CCostanzo
TBB	19/02/2013	OPDS - CCostanzo
Moreno	16/04/2013	No report
Dreyfus	30/04/2013	OPDS - CCostanzo
Los Grobo	30/04/2013	OPDS - CCostanzo
SOLVAY	07/05/2013	OPDS - CCostanzo due to leak in caustic soda tank Number 15.20.01
TBB	07/05/2013	OPDS - CCostanzo
Profertil	15/05/2013	OPDS - CCostanzo
Toepfer	16/05/2013	OPDS - CCostanzo
Moreno	29/05/2013	OPDS - CCostanzo
SOLVAY	24/06/2013	For beginning of repairs in tank. Caustic Soda No. 15.20.01
Toepfer	04/07/2013	OPDS - CCostanzo
Toepfer	30/07/2013	OPDS - CCostanzo- No report, only to request gas effluents certif
TBB	30/07/2013	OPDS - CCostanzo
Vale	30/07/2013	OPDS - CCostanzo
Cargill	01/08/2013	OPDS - CCostanzo
Dreyfus	07/08/2013	OPDS - CCostanzo
Mega	11/09/2013	With Scudelati & Asociados, for sampling of liquid effluents
DOW Barge	11/09/2013	With Scudelati & Asociados, for sampling of liquid effluents
Moreno	12/09/2013	OPDS - CCostanzo
TBB	02/10/2013	OPDS - CCostanzo
TEGRAL	09/10/2013	Guido and Roxana/Mariano from Sanitation of Borders
Moreno	09/10/2013	Guido and Roxana/Mariano from Sanitation of Borders
Los Grobo	15/10/2013	Guido and Jimena/Marina from Sanitation of Borders
PBB Polisor "barge"	17/10/2013	Guido and Jimena/Marina from Sanitation of Borders
SOLVAY	17/10/2013	Guido and Jimena/Marina from Sanitation of Borders
Mega	25/10/2013	Guido and Jimena/Marina from Sanitation of Borders
Toepfer	29/10/2013	Guido and Jimena from Sanitation of Borders
White Gulf	30/10/2013	OPDS - CCostanzo
Patagonia Norte	31/10/2013	Guido and Roxana from Sanitation of Borders
Profertil	31/10/2013	With Scudelati & Asociados, for sampling of liquid effluents
White Gulf	31/10/2013	With Scudelati & Asociados, for sampling of liquid effluents
Dreyfus	12/11/2013	OPDS - CCostanzo
Los Grobo	12/11/2013	OPDS - CCostanzo

Hs V ISIT BY COMPANY - YEAR 2013													
Company	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	TOTAL Hs/M
	HHT	HHT	HHT	HHT	HHT	HHT	HHT	HHT	HHT	HHT	HHT	HHT	
Cargill								2		1			3
Dreyfus		2		2				2			2		8
Los Grobo				2						2	2		6
Mega									1				1
Moreno				2	2				2	2			8
Patagonia										1			1
Profertil					2					1			3
Mega									1	2			3
SOLVAY					1	1				1			3
TBB		2			2		2		2				8
Toepfer									1				1
DOW Barge									1				1
Vale							3						3
White Gulf										1			1
TOTAL ANNUAL [Hs]													50

NOTE

HHT: Results stated in Man Hours of audit.

Monitoring of settleable particulate material

AIR QUALITY													
LOCATION	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13
DATE	Unit [mg/cm ²]												
Oct-12	0.79	0.79	1.27	0.51	6.84	1.24	0.93	1.37	1.21	0.17	0.354	16.921	29.123
Nov-12	0.81	1.11	1.74	0.93	4.86	0.93	0.83	1.43	1.04	0.59	0.421	4.843	9.372
Dec-12	1.13	1.12	1.54	1.03	5.36	1.79	0.69	0.93	1.13	0.39	0.354	6.291	11.214
Jan-13	1.32	1.70	1.71	1.43	4.24	2.48	0.63	1.13	1.28	0.44	0.798	5.267	11.342
Feb-13	0.71	2.49	1.11	1.64	2.23	1.79	0.85	1.34	1.45	0.78	SD	6.435	8.001
Mar-13	0.99	1.34	1.54	0.96	5.14	2.94	0.51	1.21	1.00	0.73	0.161	4.002	2.861
Apr-13	0.86	0.84	1.26	1.23	3.62	1.22	0.74	0.70	1.43	0.49	0.215	2.174	4.937
May-13	1.06	1.16	1.18	0.86	2.16	1.58	0.57	0.95	1.42	0.37	0.474	3.009	2.813
Jun-13	1.02	0.92	0.86	1.18	1.27	1.36	0.61	0.36	1.15	0.39	0.243	2.093	5.36
Jul-13	0.61	0.76	1.61	0.71	1.79	1.08	0.75	0.42	1.12	0.72	0.297	1.858	5.281
Aug-13	1.06	1.08	0.93	0.88	1.20	1.34	0.54	0.28	SD	0.53	0.221	2.684	4.029
Sep-13	0.87	0.83	0.56	0.17	0.45	0.68	0.27	0.38	SD	0.34	0.11	7.636	2.561
Oct-13	0.515	0.553	0.453	0.474	0.41	0.852	0.264	0.152	SD	0.63	0.227	5.63	2.96

Place references

P1 Cargill Malting plant

P2 Cargill Oil plant

P3 Public Promenade (S-17)

P4 CGPBB

P5 TBB

P6 Toepfer

P7 Cargill Malt Plant (Continuation of Avenente and limit fence)

P8 PGalván (Fence of jetty access guard)

P9 Firemen Ing. White

P10 Fishermen Club

P11 DREYFUS (Galván)

P12 MEGA Opposite truck exit from Dreyfus

P13 MEGA Opposite Dreyfus jetty

ESTUARY OF BAHIA BLANCA Monitoring of sediments

Latest sampling of sediments from 2013									
REFERENCE VALUES			SD	7/41	30/112	124/271	52/160	0.13/0.	SD
LOCATION	PROTOCOL	DATE	pH	Cd	Pb	Zn	Cr	70 Hg	HT
SEWAGE BB - Main discharge right side	00512204	04/01/2013	8.2	1.3	97	250	10	<0.1	85
Dumping area by former R 229 opposite waste sewer	00512205	04/01/2013	7.7	1	16.5	32	4.5	<0.1	56
Napostá stream and Ruta 252 North Side	00512206	04/01/2013	7.7	0.75	13.7	63	4	<0.1	<50
Petrochemical complex discharge sewage	00512207	04/01/2013	7.9	0.85	10.5	58	7.5	<0.1	62
Loma Paraguaya drainage channel - Petrobrás w/ S Martín Street	00512208	04/01/2013	7.6	0.8	9.2	36	4	<0.1	55
End Club Almirante Brown	00512209	04/01/2013	7.7	0.9	17.5	72	5.2	<0.1	<50
Saladillo Dulce affluent Road 3 Km 701.5	00512210	04/01/2013	7.7	1	8.4	29.4	5.5	<0.1	70
Sauce Chico stream and Road 3	0051221	04/01/2013	7.8	0.3	2	17.8	1.7	<0.1	<50
PUERTO ROSALES - PUERTO ROSALES	00512031	22/04/2013	7.9	0.6	4.1	41.2	4.2	<0.1	83
Garbage dump D first sample Dredging 2012	00512032	22/04/2013	7.9	0.8	7.1	31.2	4.2	<0.1	103
PUERTO BELGRANO - Green beacons access breakwater	00512033	22/04/2013	7.9	0.6	10.3	49.1	3.9	<0.1	97
PUERTO BELGRANO - Between berths A and C opposite con	00512034	22/04/2013	7.7	0.6	9.7	51.4	5.8	<0.1	91
Left boast between buoys 23 and 24	00512035	22/04/2013	7.7	0.29	4.8	22.8	2.9	<0.1	77
North of Rata between By 26 and By 27	00512036	22/04/2013	7.9	0.5	5.8	29.4	4.1	<0.1	87
Center Buoys 26 and 27	00512037	22/04/2013	8.1	0.2	3.3	15.8	1.7	<0.1	52
Canal de la Vieja South exit	00512038	22/04/2013	7.9	0.5	7.4	37.2	4.5	<0.1	91
MAIN CHANNEL by Buoy 28 - Variant 1-	00512039	22/04/2013	7.9	0.5	7.6	38.5	4.5	<0.1	84
MAIN CHANNEL Buoy 30	00512040	22/04/2013	8	0.6	7.3	38.5	5.5	<0.1	79
Canal de la Vieja - channel mouth 550 m South of sewage	00512041	22/04/2013	8.1	0.3	5.8	27.2	2.7	<0.1	95
PIEDRABUENA Toepfer East behind	00512042	22/04/2013	7.6	0.6	9.7	46.6	5.2	<0.1	65
South Beacon 1 opposite Toepfer new	00512043	22/04/2013	7.7	0.5	9.2	43.2	4.9	<0.1	89
TOEPFER New Center	00512044	22/04/2013	8	0.6	8.9	43.2	4.2	<0.1	73
TERMINAL B BLANCA - Berth 6	00512045	22/04/2013	7.9	0.8	11.3	55.4	6.3	<0.1	89
TERMINAL B BLANCA - BERTH 9	00512046	22/04/2013	7.9	0.7	10.4	52.7	5.8	<0.1	86
CARGILL - Cargill	00512047	22/04/2013	7.9	0.7	10.3	51.9	6.2	<0.1	78
FISHERMEN HARBOR - Center still water	00512048	22/04/2013	8	0.8	11.5	61.2	6.1	<0.1	100
MULTIPURPOSE - Berth 21 South	00512049	22/04/2013	7.9	0.7	8.3	27.9	4.2	<0.1	80
Jetty Carranza Center still water	00512050	22/04/2013	8.1	0.5	6.4	31.9	3.9	<0.1	102
South Beacon 2 opposite Berth 21	00512051	22/04/2013	7.9	0.5	6.4	31.9	3.9	<0.1	96
MEGA - Mega East	00512052	22/04/2013	7.9	0.6	9.7	45.3	4.2	<0.1	87
Dreyfus East	00512053	22/04/2013	7.9	0.5	10.7	44.3	4.9	<0.1	87
West turning circle Galván close to Beacon 4	00512054	22/04/2013	7.9	0.6	10.7	51.7	6	<0.1	88
South Beacon 5 opposite Liquid bulk jetty 1	00512055	22/04/2013	7.9	0.6	6.9	31.5	4.5	<0.1	87
Liquid bulk opposite liquid bulk jetty 2	00512056	22/04/2013	7.9	0.8	10.3	50	6.2	<0.1	101
Galván Stream opposite Esso jetty	00512057	22/04/2013	8.2	0.7	10.5	52	6	<0.1	91
Galván end North Berth 2	00512058	22/04/2013	7.9	0.8	11.6	57.6	6.8	<0.1	95
PUERTO GALVAN - BERTH 6	00512059	22/04/2013	7.9	0.9	12.6	61.8	7.8	<0.1	89
MAIN CHANNEL by Buoy 28 - Variant 1-	00512450	27/06/2013	8	0.97	7.2	28	5.2	<0.1	87
South Beacon 5 opposite Liquid bulk jetty 1	00560038	27/06/2013	7.8	1.3	8.2	30	6.4	<0.1	90
West turning circle Galván close to Beacon 4	00560039	27/06/2013	7.9	1.1	7.2	27.5	5.7	<0.1	89
South Beacon 2 opposite Berth 21	00560040	27/06/2013	8	0.9	5.5	23	4.1	<0.1	90
South Beacon 1 opposite Toepfer new	00560041	27/06/2013	8.2	1.2	10	39.5	6.5	<0.1	88
MAIN CHANNEL Buoy 30	00560042	27/06/2013	7.8	1.1	6.7	28.5	5.8	<0.1	91
Center Buoys 26 and 27	00560044	27/06/2013	8.1	0.4	3.3	10.7	1.4	<0.1	78
Left coast between buoys 23 and 24	00560045	27/06/2013	8.1	0.5	3.4	11.7	2	<0.1	85
Garbage dump D first sample Dredging 2012	00560046	27/06/2013	8	1.2	7.7	31.7	6.5	<0.1	97
Galván end North Berth 5	0051984	30/08/2013	7.6	1.2	10.8	47.5	7.2	<0.1	91

Jetty Carranza Center still water	0051989	30/08/2013	7.8	1.2	11	45	7.2	<0.1	73
South Beacon 2 opposite Berth 21	00512024	30/08/2013	7.9	1.1	8.7	34.5	6.2	<0.1	85
Multipurpose Berth 21 West	00512025	30/08/2013	7.7	1	9.4	37.7	6.2	<0.1	82
FISHERMEN HARBOR - Center still water	00512026	30/08/2013	7.8	1.1	10.2	45	6.7	<0.1	76
TERMINAL B BLANCA - BERTH 9	00512027	30/08/2013	7.7	0.9	9.2	40	5.5	<0.1	86
TOEPFER New Center	00512028	30/08/2013	7.7	1.4	11.3	47.5	10.2	<0.1	91
South Beacon 1 opposite Toepfer new	00512030	30/08/2013	7.6	0.9	8.7	30	5.3	<0.1	88
DREYFUS JETTY	00512062	30/08/2013	7.7	1.2	10.2	40	7.2	<0.1	86
MEGA - Mega Center	00512167	30/08/2013	7.8	1.1	10	42.5	7.5	<0.1	9.2
PROFERTIL - Profertil Center	00512168	30/08/2013	7.8	0.8	9.2	35.5	5.2	<0.1	90
South Beacon 5 opposite Liquid bulk jetty 1	00512449	30/08/2013	7.8	0.9	6.7	24.2	6.4	<0.1	86
Vale jetty South	00512454	30/08/2013	7.8	0.9	9	36.5	5.5	<0.1	85
MAIN CHANNEL Buoy 30	00512455	30/08/2013	7.7	0.8	8.2	32	6.4	<0.1	79
MAIN CHANNEL by Buoy 28 - Variant 1-	00512456	30/08/2013	7.9	1.3	9	37.5	6.2	<0.1	86
Center Buoys 26 and 27	00512458	30/08/2013	7.9	0.3	4.2	13.5	1.4	<0.1	59
Left coast between buoys 23 and 24	00512459	30/08/2013	7.8	0.9	8.2	32.5	5.5	<0.1	93
PUERTO ROSALES Interior channel center	00512460	30/08/2013	7.8	1.2	12.2	50	7.5	<0.1	87
PUERTO BELGRANO - Access channel	00512461	30/08/2013	7.8	1.3	11.9	52.5	7.7	<0.1	86
PUERTO BELGRANO - Between berths A and C opposite con	00512462	30/08/2013	8	1.3	12	55	7.8	<0.1	88
MAIN CHANNEL Center Buoy 20 and 21 Dumping area	00512463	30/08/2013	8	0.9	8.3	33.5	5.7	<0.1	78
Liquid bulk opposite liquid bulk jetty 2	00560025	30/08/2013	7.8	0.7	5.2	24	3.6	<0.1	67
PUERTO BELGRANO - BUOY 27	00560073	30/08/2013	7.8	1.3	9	37.5	6.2	<0.1	89
West turning circle Galván close to Beacon 4	00560121	30/08/2013	7.7	1.2	9.5	39.7	7	<0.1	90

NOMENCLATURE

All values are stated in µg/ g-dry weight [ppm] pH HYDROG

POTENTIAL [upH]

Cd

CADMIUM

Pb LEAD Zn

ZINC

Cr CHROMIUM

Hg MERCURY

HT TOTAL HYDROCARBONS

ESTUARY OF BAHIA BLANCA Monitoring of water

			Latest sampling of water from 2013																	
REFERENCE VALUES			<45	80 *	7 - 8,7	<200		25/250*	1.5	0.1	1,3 - 2,2	1	<10	<0.1	<0.1	<5.0	<5.0	<0.005	<30	
LOCATION	T	TUR	pH	BOD	Odls	SS	ClA	SULF	N AM	NA	NIT	P	Cd	Pb	Zn	Cr	Hg	HTP		
SEWAGE BB- Main mouth right side	00512212	04/01/2013	7.9	23.8	25	<5	5.2	18	<0.01	<1	24.8	28	<0.05	2.4	<5	<10	<100	<5	<1	<1
Dumping by ExR229 opposite waste sewage	00512213	04/01/2013	8.5	27.7	13	<5	5.8	9	<0.01	<1	0.14	7	<0.05	0.4	<5	<10	<100	<5	<1	<1
Napostá Stream Road 252 North side	00512214	04/01/2013	8.7	25.2	29	<5	8.1	17	<0.01	<1	<1	10	<0.05	0.4	<5	<10	<100	<5	<1	<1
Sewer channel Loma Paraguaya-Petrobrás/SMartin Street	00512215	04/01/2013	8.6	31.5	313	<5	7.3	219	<0.01	<1	0.15	14	<0.05	0.9	<5	<10	<100	<5	<1	<1
Saladillo Dulce affluent Road 3Km701.5	00512217	04/01/2013	9.1	30	629	<5	7.6	449	<0.01	<1	0.3	7	<0.05	0.9	<5	<10	<100	<5	<1	<1
End Club Almirante Brown	00512218	04/01/2013	8.6	27	15	<5	8.2	7	<0.01	<1	0.25	7	<0.05	0.2	<5	<10	<100	<5	<1	<1
Sauce Chico Stream and Road 3	00512219	04/01/2013	8.2	25	67	<5	9.4	41	<0.01	<1	0.14	8	<0.05	0.5	<5	<10	<100	<5	<1	<1
MEGA-Mega East	00512219	22/04/2013	8.2	18.5	48	<5	7.8	12	<0.01	<1	4.8	9	<0.05	0.9	<5	<10	<100	<5	<1	<0.1
PUERTO ROSALES-PUERTO ROSALES	00512162	22/04/2013	8.3	17.2	32	<5	2.5	41	<0.01	<1	7.2	11	<0.05	1.1	<5	<10	<100	<5	<1	<0.1
PUERTO BELGRANO- Green beacons access breakwater	00512163	22/04/2013	8.4	17.9	15	<5	9.6	37	<0.01	<1	6	9	<0.05	1.2	<5	<10	<100	<5	<1	<0.1
Garbage dump D first sample Dredge 2012	00512164	22/04/2013	8.4	17.1	29	<5	9	21	<0.01	<1	4.7	9	<0.05	0.8	<5	<10	<100	<5	<1	<0.1
PUERTO BELGRANO- Between jetty A and C opposite	00512165	22/04/2013	8.4	17.9	5	<5	9.6	8	<0.01	<1	3.3	9	<0.05	0.7	<5	<10	<100	<5	<1	<0.1
West turning circle Galván close to beacon 4	00512495	22/04/2013	8.3	18.5	22	<5	7.9	18	<0.01	<1	6.6	9	<0.05	0.9	<5	<10	<100	<5	<1	<0.1
South beacon 5 opposite liquid bulk jetty1	00512496	22/04/2013	8.3	18.8	25	<5	7.9	19	<0.01	<1	5.9	10	<0.05	1.1	<5	<10	<100	<5	<1	<0.1
Liquid bulk jetty opposite Liquid bulk jetty 2	00512497	22/04/2013	8.3	18.6	27	<5	8.3	25	<0.01	<1	4.1	0.8	<0.05	0.9	<5	<10	<100	<5	<1	<0.1
Galván stream opposite Esso jetty	00512498	22/04/2013	8.3	18.8	83	<5	8	61	<0.01	<1	4.3	10	<0.05	0.9	<5	<10	<100	<5	<1	<0.1
Galván North end Berth 2	00512499	22/04/2013	8.3	18.5	81	<5	8	65	<0.01	<1	6.1	9	<0.05	0.9	<5	<10	<100	<5	<1	<0.1
PUERTOGALVAN-BERTH6	00512500	22/04/2013	8.3	18.5	12	<5	8	14	<0.01	<1	7.7	10	<0.05	1	<5	<10	<100	<5	<1	<0.1
Left bank between buoys 23 and 24	00512524	22/04/2013	8.4	17.6	19	<5	8.8	24	<0.01	<1	5.9	9	<0.05	1	<5	<10	<100	<5	<1	<0.1
North of Rata between By 26 and By 27	00512525	22/04/2013	8.3	18	12	<5	8.4	16	<0.01	<1	5.1	10	<0.05	1	<5	<10	<100	<5	<1	<0.1
Center buoys 26 and 27	00512526	22/04/2013	8.3	18	15	<5	8.3	16	<0.01	<1	7.1	11	<0.05	1.1	<5	<10	<100	<5	<1	<0.1
South exit Canal de la Vieja	00512527	22/04/2013	8.4	18	29	<5	9.1	21	<0.01	<1	5.7	13	<0.05	0.9	<5	<10	<100	<5	<1	<0.1
MAIN CHANNEL by Buoy 28-Variant 1-	00512528	22/04/2013	8.3	18	17	<5	8.2	15	<0.01	<1	5.9	9	<0.05	1.1	<5	<10	<100	<5	<1	<0.1
MAIN CHANNEL Beacon 30	00512529	22/04/2013	8.3	18	42	<5	7.9	33	<0.01	<1	6.1	10	<0.05	1.1	<5	<10	<100	<5	<1	<0.1
Canal de la Vieja - mouth of channel 550 South of sewage	00512530	22/04/2013	8.3	18	20	<5	7.9	22	<0.01	<1	6.2	10	<0.05	1.1	<5	<10	<100	<5	<1	<0.1
PIEDRABUENA Toepfer East behind	00512531	22/04/2013	8.3	19	34	<5	7.6	20	<0.01	<1	5.9	11	<0.05	0.9	<5	<10	<100	<5	<1	<0.1
South beacon 1 opposite liquid Toepfer new	00512532	22/04/2013	8.3	19	15	<5	7.9	18	<0.01	<1	6.7	11	<0.05	0.9	<5	<10	<100	<5	<1	<0.1
TOEPFER new center	00512533	22/04/2013	8.3	18	63	<5	7.7	26	<0.01	<1	6.8	10	<0.05	1	<5	<10	<100	<5	<1	<0.1
TERMINAL BBLANCA- BERTH 6	00512534	22/04/2013	8.3	18.7	16	<5	8	20	<0.01	<1	9	10	<0.05	1	<5	<10	<100	<5	<1	<0.1
TERMINAL BBLANCA-BERTH 9	00512535	22/04/2013	8.3	18	18	<5	7.7	18	<0.01	<1	5.8	10	<0.05	0.9	<5	<10	<100	<5	<1	<0.1
CARGILL -Cargill	00512536	22/04/2013	8.3	18	55	<5	7.8	27	<0.01	<1	6.4	11	<0.05	1.1	<5	<10	<100	<5	<1	<0.1
FISHERMEN HARBOR - Center still water	00512537	22/04/2013	8.3	19	14	<5	8.2	22	<0.01	<1	7	9	<0.05	1.2	<5	<10	<100	<5	<1	<0.1
MULTIPURPOSE - Berth 21 South	00512538	22/04/2013	8.3	18	32	<5	7.9	34	<0.01	<1	7.6	11	<0.05	0.9	<5	<10	<100	<5	<1	<0.1
Jetty Carranza Center still water	00512539	22/04/2013	8.3	18	17	<5	7.9	14	<0.01	<1	6.3	10	<0.05	1.1	<5	<10	<100	<5	<1	<0.1
South beacon 2 opposite Berth 21	00512540	22/04/2013	8.3	19	13	<5	8	17	<0.01	<1	6	11	<0.05	1.1	<5	<10	<100	<5	<1	<0.1
South beacon 5 opposite liquid bulk jetty1	00560047	27/06/2013	8.4	7.8	30	<5	10.9	16	<0.01	<1	<1	8	<0.05	1.4	<5	<10	<100	<5	<1	<1
West turning circle Galván close to beacon 4	00560048	27/06/2013	8.4	7.8	26	<5	10.9	14	<0.01	<1	<1	8	<0.05	1.6	<5	<10	<100	<5	<1	<1
South beacon 2 opposite Berth 21	00560049	27/06/2013	8.4	7.8	36	<5	11	17	<0.01	<1	<1	7	<0.05	1.5	<5	<10	<100	<5	<1	<1
South beacon 1 opposite liquid Toepfer new	00560050	27/06/2013	8.4	7.9	29	<5	11	18	<0.01	<1	<1	8	<0.05	1.3	<5	<10	<100	<5	<1	<1
MAIN CHANNEL Beacon 30	00560051	27/06/2013	8.4	7.5	38	<5	11.2	15	<0.01	<1	<1	16	<0.05	1.9	<5	<10	<100	<5	<1	<1
MAIN CHANNEL by Buoy 28-Variant 1-	00560052	27/06/2013	8.4	7.4	58	<5	11.4	19	<0.01	<1	<1	9	<0.05	1.6	<5	<10	<100	<5	<1	<1
Center buoys 26 and 27	00560053	27/06/2013	8.4	7.5	63	<5	11.4	18	<0.01	<1	<1	8	<0.05	2	<5	<10	<100	<5	<1	<1
Left bank between buoys 23 and 24	00560054	27/06/2013	8.4	8	78	<5	11.4	22	<0.01	<1	<1	11	<0.05	1.3	<5	<10	<100	<5	<1	<1
Garbage dump D first sample Dredge 2012	00560055	27/06/2013	8.4	8	90	<5	11.4	22	<0.01	<1	<1	9	<0.05	1.5	<5	<10	<100	<5	<1	<1
Liquid bulk jetty opposite Liquid bulk jetty 2	00512029	30/08/2013	8.7	10	23	<5	11.3	21	<0.01	<1	4.6	9	<0.05	0.8	<5	<10	<100	<5	<1	<0.1
South beacon 5 opposite liquid bulk jetty1	00560027	30/08/2013	8.7	9.6	26	<5	11.3	22	<0.01	<1	5.6	9	<0.05	1.2	<5	<10	<100	<5	<1	<0.1
West turning circle Galván close to beacon 4	00560028	30/08/2013	8.7	9.8	55	<5	11.3	25	<0.01	<1	5.9	9	<0.05	1.1	<5	<10	<100	<5	<1	<0.1
Galván north end Site 5	00560029	30/08/2013	8.7	10	14	<5	11.2	28	<0.01	<1	6.6	11	<0.05	1	<5	<10	<100	<5	<1	2.8
DREYFUS JETTY	00560030	30/08/2013	8.6	9.7	62	<5	11.2	16	<0.01	<1	4.1	9	<0.05	1.1	<5	<10	<100	<5	<1	<0.1
MEGA-Mega center	00560031	30/08/2013	8.6	9.5	53	<5	11.2	19	<0.01	<1	5.3	12	<0.05	1.1	<5	<10	<100	<5	<1	<0.1
PROFERTIL - Profertil Center	00560032	30/08/2013	8.6	9.4	53	<5	11.2	18	<0.01	<1	5.5	9	<0.05	0.9	<5	<10	<100	<5	<1	<0.1
South beacon 2 opposite Berth 21	00560033	30/08/2013	8.6	9.3	31	<5	11.2	17	<0.01	<1	4.9	10	<0.05	0.9	<5	<10	<100	<5	<1	<0.1
Multipurpose Berth 21 West	00560034	30/08/2013	8.6	9.3	57	<5	11.2	16	<0.01	<1	5.1	10	<0.05	0.9	<5	<10	<100	<5	<1	<0.1
Jetty Carranza Center still water	00560035	30/08/2013	8.6	9.4	20	<5	11.2	17	<0.01	<1	5.1	10	<0.05	1	<5	<10	<100	<5	<1	<0.1
FISHERMEN HARBOR - Center still water	00560036	30/08/2013	8.6	9.6	25	<5	11.2	18	<0.01	<1	4.9	15	<0.05	1.1	<5	<10	<100	<5	<1	<0.1
TERMINAL BBLANCA-BERTH 9	00560037	30/08/2013	8.6	9.4	88	<5	11.2	19	<0.01	<1	5.3	10	<0.05	1.1	<5	<10	<100	<5	<1	<0.1

TOEPFER new center	00560061	30/08/2013	8.6	9.4	68	<5	11.1	22	<0.01	<1	4.9	10	<0.05	1.1	<5	<10	<100	<5	<1	<0.1
South beacon 1 opposite liquid Toepfer new	00560062	30/08/2013	8.6	9.1	90	<5	11.3	14	<0.01	<1	4.9	10	<0.05	1.1	<5	<10	<100	<5	<1	<0.1
Vale South jetty	00560063	30/08/2013	8.6	9.5	25	<5	11	26	<0.01	<1	5.3	11	<0.05	0.9	<5	<10	<100	<5	<1	<0.1
MAIN CHANNEL Beacon 30	00560064	30/08/2013	8.6	8.8	56	<5	11.4	21	<0.01	<1	4.8	11	<0.05	1.1	<5	<10	<100	<5	<1	<0.1
MAIN CHANNEL by Buoy 28-Variant 1-	00560065	30/08/2013	8.3	8.7	50	<5	8.6	20	<0.01	<1	5.1	10	<0.05	0.9	<5	<10	<100	<5	<1	<0.1
PUERTO BELGRANO-BUOY 27	00560066	30/08/2013	8.6	8.6	44	<5	11.7	22	<0.01	<1	4.9	11	<0.05	1.2	<5	<10	<100	<5	<1	<0.1
Center buoys 26 and 27	00560067	30/08/2013	8.6	8.5	33	<5	11.6	18	<0.01	<1	5.2	9	<0.05	1.1	<5	<10	<100	<5	<1	<0.1
Left bank between buoys 23 and 24	00560068	30/08/2013	8.5	8.4	24	<5	11.7	22	<0.01	<1	5.2	11	<0.05	0.9	<5	<10	<100	<5	<1	<0.1
PUERTO ROSALES Interior channel center	00560069	30/08/2013	8.5	9.2	12	<5	11.9	15	<0.01	<1	5.1	8	<0.05	1	<5	<10	<100	<5	<1	<0.1
PUERTO BELGRANO - Access channel	00560070	30/08/2013	8.6	9.1	11	<5	11.8	18	<0.01	<1	4.8	10	<0.05	1.1	<5	<10	<100	<5	<1	<0.1
PUERTO BELGRANO- Between jetty A and C opposite	00560071	30/08/2013	8.6	12	12	<5	11.6	16	<0.01	<1	5.3	10	<0.05	1.1	<5	<10	<100	<5	<1	0.9
MAIN CHANNEL Center Beacon 20 and 21 Garbage dump	00560072	30/08/2013	8.5	8.9	19	<5	11.8	19	<0.01	<1	4.6	10	<0.05	1.1	<5	<10	<100	<5	<1	<0.1

NOMENCLATURE

All values are stated in mg/l

T	TEMPERATURE [°C]	SS	SUSP SOLIDS	P	PHOSPHORUS	Hg	MERCURY
TUR	TURBIDITY [unt]	CIA	CIANIDES	Cd	CADMIUM	HTP	HYDROCAR
pH	HYDROG POTENTIAL [upH]	SULF	SUPHURS	Pb	LEAD	S/D	No data
BOD	Biochemical Oxygen Demand	N AM	AMMON.NITorgen	Zn	ZINC	NIT	NITRITES
Od	DISSOLVED OXYGEN	NA	NITRATES	Cr	CHROMIUM		

2. LABOR SAFETY

It corresponds to the number of hours worked by the CGPBB contractors and the recorded accidents.

Accidents - Statistics

ACCIDENT STATISTICS YEAR 2013

Year	Month	Hours worked	Number of employees	Number of accidents	Lost Days	Without lost Days	Number of Incidents	Rates		
								Frequency Rate	Incidence rate	Severity rate
2013	January	13341	103	0	0	0	0	0	0	0
	February	14673	96	0	0	0	0	0	0	0
	March	17873	98	0	0	0	0	0	0	0
	April	17282	96	0	0	0	0	0	0	0
	May	19407	109	0	0	0	0	0	0	0
	June	18576	95	0	0	0	0	0	0	0
	July	17763	104	0	0	0	0	0	0	0
	August	19350	107	0	0	0	0	0	0	0
	September	17510	97	0	0	0	0	0	0	0
	October	18804	105	0	0	0	0	0	0	0
	November	18872	108	0	0	0	0	0	0	0
	December	20120	111	0	0	0	0	0	0	0
	TOTAL	213571	1229	0	0	0	0	0	0	0

Frequency rate = No. of accidents * 1,000,000 / Hours worked

Incidence rate = No. of accidents * 1000 / No. of workers

Severity rate = No. of lost days * 1000 / Hours worked

3. Licensees' audits

Audits to control safety and hygiene conditions in the facilities

Housekeeping control

Fire extinguishers survey

Control of electrical, gas, water and compressed air facilities

Date	Companies	Observations
23/04/2013	CINTRA	Removal of elements blocking access to electrical board
24/06/2013	Moorers	Installation of emergency lights
24/06/2013	OPAVI SRL	Refill fire extinguishers
24/06/2013	Ag. Marítima Austral	Refill fire extinguishers
24/06/2013	M&E (bulk PVC storage)	No observations
10/09/2013	Boskalis	
10/09/2013	ESEM SA	No observations
02/10/2013	Amiplast (bulk PVC storage)	Fallen gate (repair was ordered to SEMAPORT), it has no electrical power, fire extinguishers missing
05/12/2013	CINTRA	No observations
10/12/2013	OPAVI SRL	Left the port
10/12/2013	Ag. Marítima Austral	No observations
18/12/2013	Fruticulture building	No observations

19. Waste separation at source

In the administrative facilities of the Consorcio de Gestión del Puerto de Bahía Blanca a waste separation program is carried out, with containers to separate organic waste (basically food remains) and potentially recyclable waste. Twice a week, these wastes are taken to the ECOPLANTA in General CERRI for processing.

EVIDENCE OF ACCOMPLISHMENT: Records of disposal January 2014 to July 2014

DATE	ECOPLANT CERRI								TOTAL MONTH
JANUARY	50	20	40	40	40	20	40	40	290
FEBRUARY	20	40	40	60	10	30			200
MARCH	30	70	30	40	40				210
APRIL	30	35	35	30	30				160
MAY	40	40	40	40	40	40	40		370
JUNE	40	35	40	40	130	115			400
JULY	43	45	42	30	30	30	30	30	280
AUGUST									0
SEPTEMBER									0
OCTOBER									0
NOVEMBER									0
DECEMBER									0
									1910 TOTAL