

PROJECT COMPLETED

At 1800 hours on Wednesday, April 29, this year, the largest maintenance project ever undertaken by the Port of Esperance was completed.

The Project comprised four stages, took over 12 months to finish with each stage requiring the iron ore circuit to be closed for 16 days at a time to enable crucial repairs to be carried out.

The first shut down was on April 24, 2014.

The problems with the circuit were identified back in 2013 by our consulting engineers from WBM during their annual inspection of cargo handling infrastructure. These problems needed urgent attention.

Following discussions with our client, Cliffs Natural Resources re-arranged their shipping schedule to enable the work to be carried out with only a minor impact on their operations, hence the staged shutdowns over the past 12 months.

Teams worked around the clock grit blasting and painting corroded areas, and replacing main structural chords, bracing and flooring that was beyond repair.

The cost of the repair work: \$4 million.

Meeting the tight deadlines for each staged shutdown was a credit to the work of the Port employees and our local contractors.

We acknowledge South East Scaffolding, Crossview Enterprises, Mobivac and Parkers Engineering, as well

A 220 tonne was required to complete work at the top of the berth three ship loader.



as Kalgoorlie-based Penns Crane Hire and Goldfields NDT (non-destructive testing), who were also involved in providing services and equipment. WBM Personnel provided professional services when required.

Despite meeting crucial deadlines, the project had a myriad of challenges for the planning team.

Challenges such as the inclement weather that halted progress during the first shutdown, and the need to erect scaffolding to encapsulate each work area to capture dust and waste to enable the Port to meet its environmental responsibilities of protecting the marine environment.

There was also an issue with the weight of the encapsulated scaffolding when the wind velocity increased, which increased

the weight on the conveyor structure, and the risk of damage.

This required special consideration for stages three and four shutdowns for which lightweight aluminium modules had to be designed and built and plans made to remove the encapsulation when the wind past a certain speed.

And additional studies were required to determine how to deal with the corrosion problems at the top of the loader, which resulted in a 220 tonne crane with its extended boom being brought from Kalgoorlie to enable the work to be completed.

This created another issue as the loader and part of the conveyor are located over water and significant earthworks were required on the breakwater to accommodate the crane.

Another Safety Initiative

The health and safety of our employees, contractors and all Port users is our number one priority. The Occupational, Health and Safety and Human Resources Departments have been collaborating to further improve what we currently do and how we do it to further enhance our safety record.

As part of our on-going commitment, the Port continues to develop training systems with the latest step in our safety journey being the introduction of training management software that will enable us to target Competencies, Compliances and Procedures.

This software is available to all Port users and specifically to our Supervisors and Managers who will be able to see which employees have a current competency or qualification to undertake a particular task.

The system also enables us to identify training needs, ensure personnel have the relevant training for their role and to be able to store all training data required for legislative compliance. It will also provide us with information about the minimum key requirements of any new employee, contractor or Port user before they come on site.

Furthermore, we will also implement the use of online training that will enable trainers to be in the field to assess and deliver this training program more efficiently than using an online system.

This will put the Port of Esperance on par with other industry leaders with onboarding as well as maintaining competencies.

To implement the new training management system, the Port has added an additional trainer to the HR team with the key focus being on in-field training and assessment.

This system represents a major milestone in our safety journey, one that will enable us to continue to operate in a safe and efficient manner.

We Are Listening!

The American entertainer Neil Diamond once penned and sang lyrics about the “Beautiful Noise” coming up from the street. Noises like the clickety-clack of a train on a track, like the songs of cars on their furious flight and like the sounds of kids playing in the park.

Of course, not everyone shares Neil’s sentiments: to many, noise doesn’t have a beautiful sound or a beautiful beat, especially if you live close to the annoying source.

The Port of Esperance is particularly concerned about noise, about its potential impact on our community and, in particular, on our neighbours who live on our doorstep.

We manage our noise to strict legal limits and are brought to task if we exceed these limits; and we are aware that we are being listened to.

But not all the noises emanating from within the Port boundary are from our operations. Noises come from other sources that we are not legally responsible for such as from trains, CBH operations or for noise coming from Summit Fertiliser. And then there is the

town power station, and ships that use their horns to indicate their intentions, like turning this way or that, or going into reverse.

Despite this, we have a duty of care to address concerns about unreasonable noise coming from within our boundary, regardless of the source.

To get a better understanding of the extent of the problem, such as the types of noises, its intensity and its source, we recently installed a noise logger in Bostock Street, above and on the Port boundary.

This enables us to identify noise sources and determine what needs to be done to alleviate and control problematic noise. It also enables us to tune our noise model, which is based on Port-noise only and is used to inform the regulator of any possible changes to our noise emissions from changes in our operations.

And the logger has a replay function which enables us to investigate noise complaints and take appropriate action.

Whether you agree or not, Diamond is probably right when he sings that the beautiful noise is made of “joy and strife” and “It’s the magic of life”.



Environmental Manager Alex Leonard inspecting the new noise logger in Bostock Street

Operations a Buzz

New business, new technology, new opportunities. The Port of Esperance is currently engaged in these activities with personnel from nickel miners Sirius Resources and Poseidon and potential woodchip exporters APLE and Southern Pacific Fibre (SPF).

Sirius is developing its Nova nickel project that is located some 370km north east of Esperance, and is looking to export up to 200,000 tonnes of nickel concentrates and 50,000 tonnes of copper concentrates a year starting in 2016. This will significantly increase the volume of concentrates handled by the Port, which totalled only 92,653 tonnes last year, reflecting the fall in price of the commodity on world markets and the closure of some mines.

(In 2010, 323,684 tonnes was exported from the Port. Ravensthorpe nickel, which produces a nickel hydroxide exported 152, 602 tonnes of their product last financial year.)

Sirius plans to transport its product from the mine site to the Port in containers, and is discussing the use of rotainer technology to transfer product from the container into the ship’s hold, a system that is used at many ports around Australia.

This system uses the gantry crane to lower the container deep into the hold of a ship where it is automatically tipped to empty its contents. A water misting spray eliminates dust from the process, and the container lid is secured before being lifted and returned to the berth.

A Works Approval that considers the environmental management of handling Sirius’ products will be prepared. An application for the use of Rotainer Technology at the Port has been submitted to the Department of Environmental Protection.

Poseidon is developing a number of mines, including at Mt Windarra in the Shire of Leonora, located some 660km north of Esperance, and the Black Swan and Lake Johnson Deposits,



Bulk bags stored at the Port before being loaded onto a ship for export.

which they acquired from Norilsk Nickel (Australia).

The company has indicated that it wants an initial one-off export of 4000 tonnes of nickel concentrates in bulk bags later this year, a handling method that the Port has significant experience using. The bags will be loaded at the mine site and transported to the Port for storage under cover. The Port has had significant experience in handling the product by this method.

Woodchip exporter APLE is finalising arrangements for the first of three trial shipments of woodchips from the Port. Each shipment will comprise about 30,000 tonnes, and will use a mobile conveyor with an attached hopper to discharge the product from berth two into a ship’s hold. The woodchips will be stored offsite and trucked into the Port and discharged into the hopper.

SPF is looking at an October date this for its first trial shipment.

TANKER JETTY ISLAND

While work continues to demolish the Tanker Jetty Island, it is time to reflect on the Jetty's rather colourful history.

The jetty was originally known as the Deep Water Wharf when it was built in 1935, and later became known locally as the Tanker Jetty because of its use by visiting fuel tankers. Its head has been involved in several headlining incidents over the years.

In the old days, from 1935 onwards to when the last commercial vessel berthed - that was the BP Endeavour on May 28, 1977 - the successful manoeuvring of ships alongside depended on the skill of the Harbour Master and the ship's captain and crew.

There were no tugs in those days. A line boat would bring a rope ashore and fore and aft springs would be heaved in and attached to bollards on the jetty and the ship's crew would winch the vessel into position.

On two occasions (that history can recall), things didn't work out so well. The first was on Friday, November 21, 1937. In

gale force winds that day the SS Lowana crashed into the jetty 18 feet from the end (about six metres), snapped 60 feet (about 20 metres) of pylons and thrust the jetty end eight feet (about 2.5 metres) out of position. Timbers were split and railway lines bent.

The second occasion was around mid-1968. The Shell tanker Hemiglypta had Port employees scurrying for their lives when she smashed into the end, again inflicting serious, but not fatal damage, to the Jetty which was then closed to shipping for months.

Stevedores preparing to tie up the vessel that day still recall running for their lives as the collision rolled the deck timbers that chased them as they scamped out of harm's way. Pylons and rail were damaged.

It was probably the rebuilding of this structure after those two incidents that enabled it to endure the rather inhospitable elements for so long, although a landside section of the head was removed after it began to collapse about 15 years ago.

Kalgoorlie Miner 1937



And while the work continues, it is interesting to recall the way the old Town Jetty was demolished. The Town Jetty was 857 metres long, was built in 1895, its base located out from where the James Street Groyne now stands.

By the late 1960s, sections of the jetty were breaking up for some time before tyres were placed around the pylons above the water line and lit. The slow burning tyres did the job and as sections of decking collapsed they were removed from the water, all but about 100 metres from shore.

Units of the Special Air Services (SAS) use to come to Esperance to carry out training exercises. They were asked if they were interested in removing the last section.

While it was expected that 10 to 15 metres of the jetty would go at a time, they detonated the lot in one blast at the base of the pylons, and pieces of the jetty were collected from around harbour waters, heaped into a pile at the end of the breakwater and burnt. The fire burned for more than a week.

How times have changed.

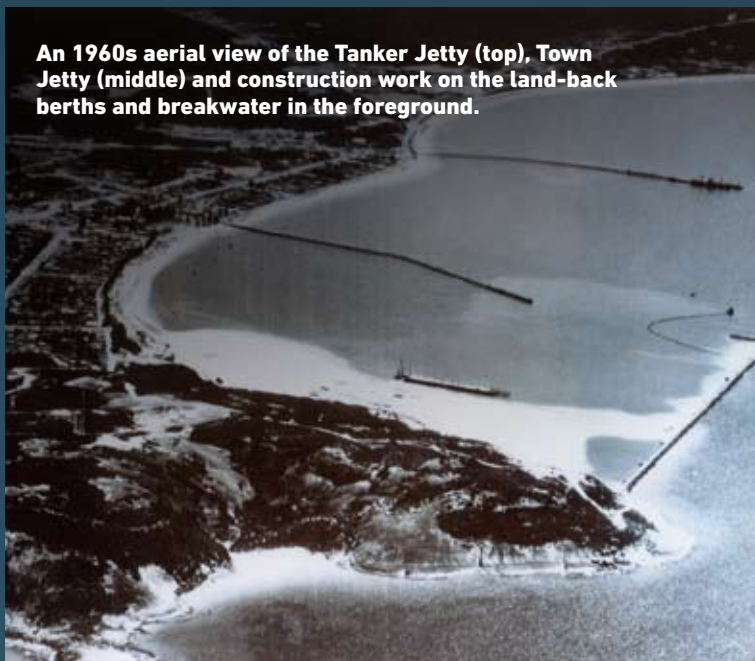
Did You Know?

During berthing of the tanker *Australian Spirit* on December 9, 1987, an engine failure occurred resulting in the vessel striking the junction of berths one and two bow on.

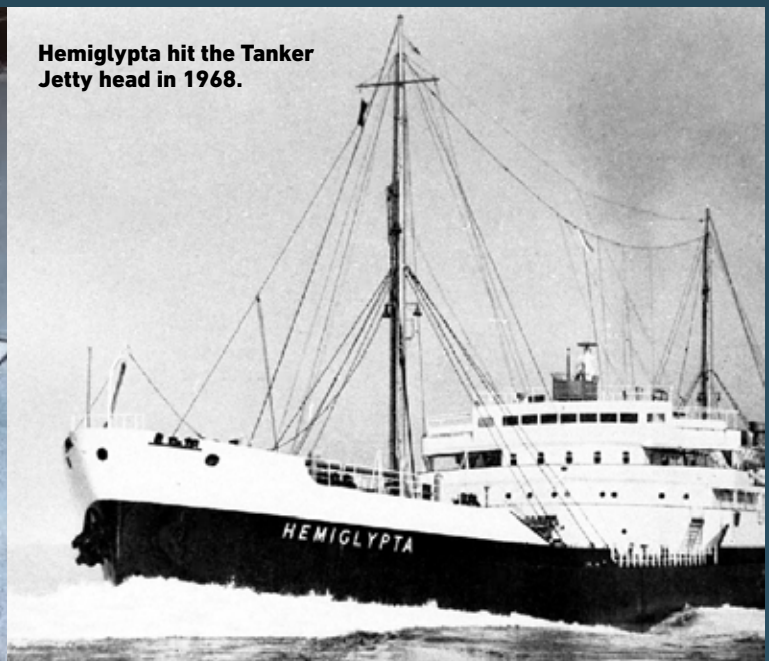
The force of the impact smashed the concrete fender apron and crushed the concrete deck backwards from the face of berth one for about four metres.

Owing to the cracking and sagging of the deck beyond the structural damage it was necessary to remove 21 metres of concrete fender beam and the concrete deck back 7.6 metres from the face of the deck, as well as nine damaged piles.

A contract was awarded for the demolition and pile repair work and the reinstatement of the deck and ancillary services. Cost of repairs was more than \$2 million.



An 1960s aerial view of the Tanker Jetty (top), Town Jetty (middle) and construction work on the land-back berths and breakwater in the foreground.



Hemiglypta hit the Tanker Jetty head in 1968.

Port Personality

BRIAN GALLOP

We all love a good home cooked meal, and some of us even try to step it up a little by trying out some higher-end recipes.

But after a day's work, who has the time or energy to go home and spend hours in the kitchen cooking a new and complicated recipe that has a long list of ingredients you may not have even heard of let alone have in your pantry? While these recipes produce beautiful meals, there is another way.

Enter 'Shoestring Gourmet', a compilation of budget recipes for the busy working person, written in simple, easy to follow language and produced by the Port of Esperance's OHS Manager, Brian Gallop.

All of the ingredients in Brian's recipes are available locally that's if you don't have them already in the pantry, and it doesn't take long to cook these healthy, tasty meals. And no fancy cooking techniques or appliances are required – the idea is that everyone can cook these meals.

Brian Gallop trained as an adult apprentice to become a chef, starting in Esperance and completing his apprenticeship while working in five star resorts in Northern NSW. As an accomplished chef, he represented



Shoestring Gourmet author Brian Gallop signing one of his books for Esperance Local Jan Fisher.

Australia in cooking competitions.

Shoestring Gourmet was spawned from an idea that he and relatives Ron and Carolyn Chambers conceived. It's about the wholesome, flavoursome meals that can be produced from ingredients that are available on local shelves, like the shelves of the two local IGA stores owned by the Chambers.

The name Shoestring Gourmet was the brainchild of Brian's friend Simon Smith who came up with a name that did not

have the word "budget" in it so that the book stood out from other similar titles. Family and friends taste tested and gave their stamp of approval to all the recipes included.

For Brian it was a labour of love, the recipes coming from an upbringing where his mother and grandmothers for generations used the same philosophy of preparing simple, tasty food. And the first two recipes in his book are family favourites.

MARINE TECHNOLOGY ONLINE

Want to know what is going on at the Port? Soon you will be able to get a bird's eye view of our activities, like seeing what ships are entering and leaving the harbour, what cargo handling activities are going on on our three berths, and even what the weather is like on the Bay.

The Port of Esperance will shortly activate a camera that is located on the Administration building that provides a live, real time video stream that will be able to be accessed on home computers.

While it is an initiative of our Marine Department whose pilots like to keep a close watch on harbour activities, and it has been installed by our IT gurus, it is also a useful tool for our Security Department who like to keep tabs on who

is coming and going into and around the Port, both landside and on the waters.

The camera complements other digital devices that our pilots use for the safe movement of ships into and out of the Port, like the real-time wind monitor that shows wind direction and speed at any given time.

For our pilots, the wind direction indicator is colour coded to provide vital information for them about when it is safe or otherwise to be moving vessels.

This is important for the large vessels that visit our waters as they are easily buffeted by wind and wave, and in a confined space like our narrow shipping channel and small turning basin they can be difficult to manoeuvre, and a potential danger to other moored ships and Port

infrastructure. And there are beaches close by.

This information is also available to the public on-line, and is providing useful information to sailors and fishers as well as anyone else going on the water.

For those interested in more technical detail about sea conditions, the Port has installed an Aquatic Wave and Current Profiler (AWCP) that measures current wave speed and direction in one metre layers from the ocean floor to the surface as well as long and small waves, storm waves and short wind waves.

This important information can be accessed on a pilot's mobile phone while manoeuvring a 300 metre long vessel in a confined space. All this information is available on the Port's website.



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