

The Department recommends that you contact the Department of Conservation Office closest to where the activity is proposed to discuss the application prior to completing the application forms. Please provide all information requested in as much detail as possible. Applicants will be advised if further information is required before this application can be processed by the Department.

This form is to be used when the proposed activity is the building or use of any private or commercial facility or structure on public conservation land managed by the Department of Conservation. Examples may include lease of land to erect an information centre; authorisation to erect a weather station; or construct or lease a private/commercial campground or lodge. This form is to be completed in conjunction with either Applicant Information Form 1a (longer term concession) or Applicant Information Form 1b (one-off concession) as appropriate.

Please complete this application form, attach Form 1a or Form 1b, and any other applicable forms and information and send to <u>permissions@doc.govt.nz</u>. The Department will process the application and issue a concession if it is satisfied that the application meets all the requirements for granting a concession under the Conservation Act 1987.

If you require extra space for answering please attach and label according to the relevant section.

## A. Description of Activity

Please describe the proposed activity in detail – where the site is located, please use NZTM GPS coordinates where possible, what you intend to use the building for, whether you intend to make any changes to the infrastructure.

Please include the name and status of the public conservation land, the size of the area for which you are applying and why this area has been chosen.

If necessary, attach further information including a map, a detailed site plan and drawings of proposal and label Attachment 3b:A.

The Milford Café Fuelstop is located adjacent to the Discover Milford Sound Cruises Information Centre and Café at 83 Milford Sound Highway, Milford Sound, Southland District and consists of a small concrete forecourt covered with a canopy with two pumps dispensing 91 Unleaded Petrol and Diesel.

The site is located at 83 Milford Sound Highway -44.67246014835688, 167.92690152071026

### B. Alternative sites considered

If your application is to **build**, **extend or add** to any permanent or temporary structures or facilities on public conservation land, please provide the following details:

- Could this structure or facility be reasonably located outside public conservation land? Provide details of other sites/areas considered.
- Could any potential adverse effects be significantly less (and/or different) in another conservation area or another part of the conservation area to which the application relates? Give details/reasons

## C. Larger area

Is the size of the area you are applying for **larger** than the structure/facility

YES / NO

If **yes**, please detail the size difference in the box below, and answer the following 3 questions, if **no** please go on to the next section:

Is this necessary for safety or security purposes?YES / NOIs this necessary as an integral part of the activity?YES / NO

If the answer to any of the above is yes, please provide details and attach supporting evidence if necessary and label Attachment 3b:C.

### D. Exclusive possession

Do you believe you need **exclusive possession** of the public conservation land on which your structure/building is located, ie no one else can use the land during your use of it? YES / NO (Exclusive occupation requires a lease which requires public notification of the application)

If **yes**, please answer the following 3 questions, if no please go to the next section:

Is exclusive possession necessary to protect public safety? YES / NO

Is exclusive possession necessary to protect physical security of the activity? YES / NO

Is exclusive possession necessary for the competent operation of the activity? YES / NO

If the answer to any of the above is yes, please provide details and attach supporting evidence if necessary and label Attachment 3b:D.

Exclusive possession is required as this is a fuel storage facility and needs to restrict public access to hazardous substances and critical infrastructure.

### E. Technical Specifications (for telecommunications sites only)

Frequencies on which the equipment is to operate

Power to be used (transmitter output)

Polarisation of the signal

Type of antennae

The likely portion of a 24 hour period that transmitting will occur

Heaviest period of use

### F. Term

Please detail the length of the term sought (i.e. number of years or months) and why.

Note: An application for a concession for a period over 10 years must be publicly notified, an application for a concession up to 10 years will not be publicly notified unless the adverse effects of the activity are such that it is required, or if an exclusive interest in the land is required.

10 years.

## G. Bulk fuel storage

Under the Hazardous Substances and New Organisms Act 1996 (HSNO Act) 'Bulk fuel storage' is considered to be any single container, stationary or mobile, used or unused, that has a capacity in excess of 250 litres of Class 3 fuel types. This includes petrol, diesel, aviation gasoline, kerosene and Jet A1. For more information on Hazardous Substances, go to: http://www.business.govt.nz/worksafe/information-guidance/legal-framework/hsno-act-1996

Do you intend to store fuel in bulk on the land as part of the activity? YES / NO

If you have answered yes, then please provide full details of how and where you intend to store the fuel, and label any attachments including plans, maps and/or photographs as Attachment 3b:G. If your concession application is approved you will be required to provide a copy of your HSNO compliance certification to the Department before you begin the activity.

3b:G Milford Café Fuelstop Site Information.pdf

## H. Environmental Impact Assessment

This section is one of the most important factors that will determine the Department's decision on the application. Please answer in detail.

In column 1 please list all the locations of your proposal, please use NZTM GPS coordinates where possible. In column 2 list any special features of the environment or the recreation values of that area. Then in column 3 list any effects (positive or adverse) that your activity may have on the values or features in column 2. In column 4 list the ways you intend to mitigate, remedy or avoid any adverse effects noted in column 3. Please add extra information or supporting evidence as necessary and label Attachment 3b:H.

Refer to Steps 1 and 2 in your Guide to Environmental Impact Assessment to help you fill in this section.

| Location on public conservation land | Special feature or value              | Potential effects of your<br>activity on the feature or<br>value (positive or adverse) | Methods to remedy, mitigate or avoid any adverse effects identified   |
|--------------------------------------|---------------------------------------|--|---|
| EG: Tararua Forest Park              | Northern rata -<br>threatened species | Damage to the plants by construction   | Brief construction and maintenance staff of the location and importance of the species; clearly tape off areas with the species to avoid damage |
|                                      |                                       |  |   |
|                                      |                                       |  |   |
|                                      |                                       |  |   |
|                                      |                                       |  |   |
|                                      |                                       |  |   |
|                                      |                                       |  |   |
|                                      |                                       |  |   |
|                                      |                                       |  |   |
|                                      |                                       |  |   |
|                                      |                                       |  |   |

## I. Other

Is there any further information you wish to supply in support of your application? Please attach if necessary and label Attachment 3a:I.

3b:I Milford Café As Built Layout Plan.pdf

## 3b:G Milford Café Fuelstop Site Information

#### Description

The Milford Café Fuelstop is located adjacent to the Discover Milford Sound Cruises Information Centre and Café at 83 Milford Sound Highway, Milford Sound, Southland District and consists of a small concrete forecourt covered with a canopy with two pumps dispensing 91 Unleaded Petrol and Diesel.

### Tank

The fuel is supplied from a 20,000-litre twin-compartment double wall fibreglass underground tank that was installed in 2005. There are monitoring wells at either end of the concrete covered tank pit.

#### Dispensers

The single Compac dual product dispenser is activated by an Invenco G6 300 Outdoor Payment Terminal that uses a satellite connection via a satellite dish mounted on the Café building for telecommunication.

There is a clearly labelled Emergency Stop Button adjacent to the forecourt.

The site retails the only petrol and diesel available for the public in Milford Sound. The next closest service station is at Te Anau, 118km away.

#### Spill Containment

Stormwater drains from the concrete forecourt to a 3-stage API Interceptor. The interceptor is fitted with a manual shut off valve. It is presumed the interceptor drains to the stormwater sump in the middle of the road adjacent to the site but is not known where it goes from here.

Spill kit located on forecourt.

#### Compliance

The Legal Description of the property is Section 1 Survey Office Plan 11558, Certificate of Title SL9C/553

The site is a registered HAIL site (SLUS-00000097) on the Southland Contaminated Land Register.

The tanks have current Stationary Container System Compliance and Location Compliance Certificates issued in accordance with regulations 6.32 and 17.91 of the Health and Safety at Work (Hazardous Substances) Regulations 2017.

The site is covered by an Emergency Response Plan.

Preventative Maintenance Inspections are undertaken monthly. These inspections include:

- Pumps and dispensers
- Fill/dip points and bulk storage tanks
- Drainage and oil/water separators
- Automatic tank gauges
- Payment systems

More comprehensive six-monthly checks are also undertaken that include:

- Critical safety devices
- Pumps and dispensers

- Fill/dip points and bulk storage tanks
- Automatic tank gauges
- Payment systems
- Underground or aboveground tank checks
- Vent pipes
- Drainage and sumps
- General site observations



| ON SITE CHECK LIST:         TOC WORK<br>COPULTIO           11 ALL UNDERGROUND SERVICES TO BE SHOWN         - DUCTING           - DUCTING         - PUTURE USE DUCTING           - SWA CABLES (UNDERGROUND)         - PETROLEUM SUPPLY LINES           - PETROLEUM VENT LINES         - PETROLEUM VENT LINES           - DRAINAGE (INCLUDINE PIPE SIZES AND INVERTS)         - WATER SUPPLY           - SWA CRIP CABLES (UNDERGROUND)         - SANO TRAP LOCATION AND SIZE           - SANO TRAP LOCATION AND SIZE         - SANO TRAP LOCATION AND SIZE           - SWITCHDOARD STANK GALGING CABINET LOCATION         - ANY KNOWN CHANGE TO EXISTING SERVICES |  |   |   | TREES   |  |                         |
|---|--|---|---|---|--|-------------------------|
| NOTES:         11 GRID SCALE = 2.0m x 2.0m         2) SHOW SERVICES DEPTH IF AVAILABLE         31 LABEL ALL SERVICES         4) ANY DEVIATIONS FROM SITE LAYOUT AS DESIGNED TO<br>BE MARKED ON PLAN WITH DIMENSIONS OF CRITICAL<br>ITOMS FROM BOUNDARY REFERENCES.         AS BUILT LEGEND         CZZZZZZ DUCTING         FUTURE DUCTING         SWA CABLES  |  |   |   |   | TRi  | ES                      |
| TAN GAUGING CABLE     TAN GAUGING CABLE     PETROLEUM SUPPLY LINES     PETROLEUM FULL LINES     PETROLEUM YENT LINES     DRAINAGE     WALCH SUPPLY - (CAR WASH)     T TELECOM CABLES  |  |   |   | TREES   |  |                         |
|   |  | TRUCK<br>SHED<br>I<br>TO PENCE BY<br>Get SHED<br>Y<br>TO PENCE BY                                     | TREES   |   |  |                         |
| AS BULT ISUE INCOMPSIONS ARE TO BE USED IN PROCEPORE TO SOLUCE DIMENSIONS.  | AMDINIDITS<br>CONTRACTOR NUST VERSY ALL<br>CONTRACTOR NUST VERSY ALL<br>DIMENSIONS ON SPEC | SNLUCK 08/03/06 J KAY<br>ONUM DATE ORCOLD<br>DIMENSIONS ARE IN MILLIMETORS<br>UNLESS SHOWN OTHERWISE. | X-REP'S IMPORTED PROM:<br>SUILDING<br>NEW.OWG | Orderet UF,<br>onto:         Orderet UF,<br>onto:         Orderet UF,<br>onto:           Orderet UF,<br>onto:         SCALE:         1:00 € A1           Orderet UF,<br>orderet UF,<br>order | Fuelquip Unit and the second s | ALLIED<br>PETROLEUM LTD |

PATTLE DELAMORE PARTNERS LTD Level 2, 134 Oxford Terrace Christchurch Central, Christchurch 8011 PO Box 389, Christchurch 8140, New Zealand Office+64 3 **345 7100** Web <u>www.pdp.co.nz</u> Auckland Tauranga Hamilton Wellington **Christchurch** Invercargill





20 December 2022

Sean Rooney
 Allied Petroleum Limited
 PO Box 31201
 CHRISTCHURCH 8444

Dear Sean

# ENVIRONMENTAL IMPACT ASSESSMENT – ALLIED MILFORD CAFÉ FUELSTOP, MILFORD SOUND

#### 1.0 Introduction

PDP have been commissioned by Allied Petroleum Limited (APL) to prepare an environmental impact assessment (EIA) for their fuelstop facility located at Milford Café, 83 Milford Sound Highway, Milford Sound. The EIA has been prepared to support the concession application with the Department of Conservation (DoC) for the operation of the existing facility. The facility is considered a 'High Impact Activity' by DoC.

The EIA outlines the following:

- A description of the activity including details of the existing facility, its operation, monitoring programme and safety features;
- : A description of the environment the facility is located; and
- An assessment of environmental effects associated with the operation of the facility; in the event of a spill or natural disaster that compromises the integrity of the system, and the mitigation measures in place to avoid, remedy or mitigate an adverse effect.

#### 2.0 Description of Activity

The fuelstop is an active self-serve (unmanned) refuelling facility located at 83 Milford Sound Highway, Milford Sound. The fuelstop operates in a general commercial area and is open to the general public and commercial operators. This is the only fuelstop supplying petrol and diesel for the general public in Milford Sound. The next closest service station is at Te Anau, 118 km away. As a result, this is considered a critical service for the area.

The facility consists of an underground storage tank (UST), which supplies a single dual fuel dispenser with 91 petrol and diesel. The approximate co-ordinates of the fuelstop is 44°40′20.95″S 167°55′36.89″E.

The fuelstop is located adjacent to the Discover Milford Sound Cruises Information Centre and Café. The forecourt is covered with a canopy and sealed with concrete. The area immediately surrounding the forecourt is surfaced with asphalt. Stormwater runoff from the forecourt is directed to onsite sumps before passing through a 3-stage API Interceptor. The discharge point from the interceptor is unknown and is



suspected to discharge to a stormwater sump in the road between the forecourt and the vegetated area to the northeast, however, this is not confirmed. Eventual discharge is likely to be to ground via a soak hole given the nature of the underlying geology.

Refer to Figures 1 and 2 for the facility layout and attached photographs.

#### 2.1 Underground Petroleum Storage System

The underground petroleum storage system (UPSS) comprises a single split compartment UST, underground pipework and a single dispenser supplying 91 petrol and diesel. The site was originally operated under Mobil branding by the Milford Café until July 2005 where the original UPSS was removed by Mobil and Allied subsequently installed the current UPSS. Two monitoring wells were installed as part of the decommissioning of the Mobil system (refer Figure 2) to allow for the ongoing monitoring of the subsurface conditions.

- Tank 20,000 L split compartment (10,000 L 91 petrol and 10,000 L diesel) double wall fibreglass tank
- Dispenser single Compac dual fuel dispenser activated by an Invenco G6 300 Outdoor Payment Terminal that uses a satellite connection for telecommunication.
- Pipework double wall UPP pipe
- Fill Point remote fills

Fuel is pumped from the UST to the dispenser using red jacket submersible pumps with mechanical and electronic leak detectors. The pumps are only activated after a swipe card has been used at the terminal and nozzle activated. When not in use the pipeline is not under pressure thus preventing accidental spillage greater than the contents of the pipeline.

There is also a solenoid value at the tank which only opens after activation of the swipe card and prevents product siphoning from the pipeline or dispenser.

The tanks have automatic tank gauging fitted and this is monitored remotely for any discrepancy in reconciliation.

There is a clearly labelled Emergency Stop button adjacent to the forecourt (see photos) in case of an emergency.

#### 2.2 Spill Containment

The forecourt and immediate surrounding area is surfaced with either concrete or asphalt. Any above ground spillage/leak from the forecourt will be directed via surface contouring to the onsite sumps and passed through a 3-stage API Interceptor. The interceptor has an operational fuel containment capacity of 2,500 L (i.e. will contain 2,500 L of fuel whilst still allowing stormwater to pass through) and a manual shut off valve which can be activated to shut the entire stormwater system down.

The UST and pipework are both double walled meaning that any leak of the inner tank/pipe is captured within the secondary containment system. Unless a breach of the secondary containment occurs, there would be no discharge to the environment from the underground components.

#### 2.3 Compliance and Inspections

The tank has a current Location Compliance Certificate (expires 26 March 2023) and Stationary Container System Compliance Certificate (expires 28 August 2023) issued in accordance with regulations 6.32 and 17.91 of the Health and Safety at Work (Hazardous Substances) Regulations 2017 (copies attached).



The site is covered by an Emergency Response Plan. A copy of this is included with the application.

3

Preventative Maintenance Inspections are undertaken monthly. These include inspection of the:

- Pumps and dispensers
- Fill/dip points and bulk storage tanks
- Drainage and oil/water separators
- Automatic tank gauges
- : Payment systems

More comprehensive six-monthly checks are also undertaken that include inspection of the:

- : Critical safety devices
- Pumps and dispensers
- : Fill/dip points
- Automatic tank gauges
- : Payment systems
- Aboveground tank checks
- : Vent pipes
- : Drainage and sumps
- : General site observations

#### 3.0 Description of the Environment

The site is located within the Fiordland National Park and within the heart of the commercial area of Milford Sound Settlement. The area is classified as a highly disturbed area given the level of commercial infrastructure already in place. The area is located within land parcel Section 1 Survey Office Plan 11558 and is zoned as National Park under the Southland District Plan.

The fuelstop is located near the Discover Milford Sound Cruises Information Centre and the Blue Duck Café and Bar. The Milford Sound Fire Station is located on the southeastern side of the fuelstop. A small vegetated bush area is located to the northeast of the fuelstop between the fuelstop and Milford Sound Highway. Beyond this to the northeast, there is a carparking area and public toilets before Freshwater Basin, which is located approximately 90 m away.

Freshwater Basin is part of the upper reaches of Milford Sound, which is considered to be an ecologically sensitive surface water body due to the presence of ecologically sensitive aquatic flora and fauna which is internationally renowned.

The forecourt and immediate surrounding area is surfaced with concrete or asphalt and all stormwater is captured and passed through an interceptor before discharge. There is a small vegetated area located approximately 15 m to the northeast, however, the closest area of natural bush is located 50 m to the south. This area of natural bush is located up-slope and also up-hydraulic gradient from the fuelstop so unlikely to be affected from any type of spill event (above or below ground) from this site.

The fuelstop is located in a highly disturbed and commercial part of the Milford Sound settlement and therefore there is unlikely to be highly sensitive terrestrial fauna and flora in the immediate vicinity of the facility. However, given the properties of fuel and the facility's general proximity to surface water, Freshwater Basin, and Milford Sound, are considered sensitive receptors and could be adversely impacted as a result of a significant fuel leak/spill event.



#### 4.0 Assessment of Effects

An environmental impact assessment has been undertaken to understand the environmental effects associated with a spill/leak event and the mitigation measures in place to avoid, remedy or mitigate an adverse effect occurring.

4

The assessment has been based on operational spillage or a spill or leak event occurring as opposed to the effects from customers using the facility as the facility is located in a recognised commercial area. The discharge of fuel into the environment is considered the primary driver to any adverse effect occurring and has been the focus of this assessment.

The following table provides a summary of the possible spill/leak scenarios, how the contaminants would enter the environment and measures to avoid, remedy or mitigate the effects.

#### ENVIRONMENTAL IMPACT ASSESSMENT - ALLIED MILFORD CAFÉ FUELSTOP, MILFORD SOUND

| Table 1: Assessment of Effects and Mitigation Measures |   |  |  |
|--|---|--|--|
| Values   | Spill/Leak Scenario & Potential Adverse Effects   | Mitigation Measures  |  |
| Terrestrial<br>(Land) Values                           | <ul> <li>Spillages during refilling the UST by road tankers</li> </ul>  | Above Ground Spillage/Leak   |  |
|  | <ul> <li>Operational spillage by customers (to land)</li> </ul>   | Operational drips and minor spillages during dispensing are possible and likely (in fact typical   |  |
|  | <ul> <li>Equipment failure/rupture to land (includes<br/>natural disasters including earthquakes and<br/>floods)</li> <li>The above scenarios could result in fuel being spilt or<br/>discharged to ground</li> </ul>   | for all service stations) and is the reason why the forecourt is surfaced with concrete and contoured to direct stormwater (and any drips or minor spillages of fuel) to onsite sumps and passed through a 3-stage API Interceptor before discharge. The interceptor is designed to capture any spilt fuel and has a 2,500 L storage capacity whilst still allowing stormwater to pass through the unit. The manual shut off valve can also be activated which would close off any discharge from the interceptor. |  |
|  | The forecourt and immediate surrounding area is<br>surfaced with concrete or asphalt therefore any<br>above ground spillage would be directed via site<br>contours to onsite sumps and passed through a 3-<br>stage API Interceptor.<br>In the unlikely event that a breach of the secondary<br>containment of the underground site infrastructure<br>occurs, fuel would enter the ground. Minor leaks of<br>fuel would bind to the surroundings soil and given<br>the site is completely sealed there would be no<br>effect to any natural features such as native<br>vegetation. There is also considered to be no risk to<br>site users (i.e. human health via direct contact) given<br>the site is completely sealed (i.e. no exposure<br>pathway). | A Site Emergency Response Plan has been prepared for the fuelstop and is included with the application. This Plan outlines the emergency responses associated with a disaster or spill/leak event. This includes contact details and a response process with regional and local councils, civil defence and the police (depending on the event).<br>Below Ground Leak  |  |
|  |   | The likelihood of a leak in the fuel system is very low, and the likelihood of a leak entering the environment even lower as a result of a number of mitigation measures.  |  |
|  |   | <b>Secondary containment</b> - The UST is double walled fibreglass and pipework double walled UPP. This means that any leak of these components is captured within the secondary containment system. Unless a breach of the secondary containment occurs, there would be no discharge to the environment.  |  |
|  |   | <b>Reconciliation</b> - The tank has an automated and remotely monitored tank gauges continually reconciling the volume in the tanks against the volume of fuel dispensed. Any discrepancy triggers and alert to investigate the cause. The automated monitoring system means that   |  |
|  | shallow soils and migrate vertically through the soil<br>column to the water table where it would move in   | any leak from the fuel system can be investigated, and actions initiated to quickly, minimising any environmental effect.  |  |
|  | the direction of groundwater flow. If a sufficiently  |  |  |
|  | large spill/leak was to occur, there is the potential it  |  |  |
| 1  | could reach Freshwater Basin/Militord Sound Via   |  |  |



#### ENVIRONMENTAL IMPACT ASSESSMENT - ALLIED MILFORD CAFÉ FUELSTOP, MILFORD SOUND

the groundwater migration pathway and presents as a risk to the sensitive ecological receptors present.

If fuel (primarily related to petrol) migrated beneath any existing nearby buildings, a potential risk to site workers via the indoor inhalation exposure pathway may exist. This would need to be assessed as part of the investigation and remedial works triggered as a result of a significant spill/leak event.

The mitigation measures will not only reduce the potential for a large spills/leaks to occur, but if one did occur, it would be identified quickly and remedial works initiated to minimise any environmental or human health effect. This is a significant change to the fuel systems that operated in the past without the automated monitoring systems, where they would continue to operate and leaks could remain undetected for long periods of time. This not only increased the volume of fuel released into the environment, but also allowed fuel to migrate further from the leak point in the subsurface environment, often undetected until it reached a receptor triggering a response. **Pump activation** – The pumps to dispense fuel will only operate when the swipe card system has been activated. This means in the event of a pipeline rupture, the pump will not automatically switch on to keep the line pressurised. The volume of fuel in the line is the maximum that could be lost to the environment in this situation.

**Training** – The road tanker drivers delivering fuel to the facility are highly trained and experienced. This will reduce the risk of any spillage during the transfer process.

**Testing and inspections** – Renewal of the stationary container system compliance certificates, and any required testing for that renewal process, will be completed every 5 years (in accordance with Worksafe Regulations). Monthly preventative maintenance inspections are undertaken and more comprehensive inspections undertaken 6-monthly to monitor the condition of the facility and requirement of any maintenance. The two monitoring wells installed at the site also allow for ongoing monitoring of subsurface ground conditions, as required.

In the event of a natural disaster, the level of damage to the facility will depend on the severity and nature of the event. However, the measures outlined above will provide a degree of mitigation to the release of fuel into the environment. The facility will be inspected as soon as possible following a natural disaster event to confirm the facilities integrity.



#### ENVIRONMENTAL IMPACT ASSESSMENT - ALLIED MILFORD CAFÉ FUELSTOP, MILFORD SOUND

| Aquatic and<br>Marine Values   | <ul> <li>Overland flow into Freshwater Basin (large above ground spill event or stormwater runoff that</li> </ul>  | Allied recognises the sensitive ecological receptors present within Freshwater Basin and is why a number of mitigation measures have been adopted for this fuelstop.  |  |  |
|--|--|---|--|--|
|  | <ul> <li>exceeds onsite capacity)</li> <li>Subsurface migration of contaminants with groundwater flow into Freshwater Basin (associated with ground contamination)</li> </ul>  | <b>Secondary containment</b> - The UST is double walled fibreglass and pipework double walled UPP. This means that any leak of these components is captured within the secondary containment system. Unless a breach of the secondary containment occurs, there would be no discharge to the environment.   |  |  |
| For any fuel to reach Fresh<br>need to be a significant at<br>event that exceeds the ca<br>and discharges overland a<br>surface water body.<br>Similarly, for fuel to reach<br>approximately 90 m away<br>migration, the leak would<br>large to migrate that dista<br>a long period of time. | For any fuel to reach Freshwater Basin, it would<br>need to be a significant above ground leak or spill<br>event that exceeds the capacity of the interceptor<br>and discharges overland and migrates towards the<br>surface water body. | <b>Reconciliation</b> - The tank has an automated and remotely monitored tank gauges continually reconciling the volume in the tanks against the volume of fuel dispensed. Any discrepancy triggers and alert to investigate the cause. The automated monitoring system means that any leak from the fuel system can be investigated, and actions initiated to quickly, minimising any environmental effect and potential for fuel to migrate any significant distance from the area of the leak.                         |  |  |
|  | approximately 90 m away via groundwater<br>migration, the leak would have to be sufficiently<br>large to migrate that distance and be undetected for<br>a long period of time.   | <b>Pump activation</b> – The pumps to dispense fuel will only operate when the swipe card system has been activated. This means in the event of a pipeline rupture, the pump will not automatically switch on to keep the line pressurised. The volume of fuel in the line is the maximum that could be lost to the environment in this situation.  |  |  |
|  |  | The likelihood of a leak entering the ground and being of sufficient volume to migrate to<br>Freshwater Basin is low as a result of the underground components being secondary<br>contained and tank gauging/reconciliation monitoring. The mitigation measures will not only<br>reduce the potential for a large spills/leaks to occur, but would be identified quickly meaning<br>that it would be able to be investigated and remediated minimising the potential for<br>contaminants to reach Freshwater Basin.       |  |  |
|  |  | In the event of a natural disaster, the level of damage to the facility will depend on the severity and nature of the event. However, the measures outlined above will provide a degree of mitigation to the release of fuel into the environment. In particular, the pump activation requirement will mean if the dispenser/pipework is damaged, only the volume of the pipework will be released. Emergency responses practices and spill containment would then be actioned to minimise the impact to the environment. |  |  |
|  |  |   |  |  |



#### 5.0 Summary

An environmental impact assessment for the Allied Milford Café has identified that the fuelstop is in a 'high impact area' defined by DoC.

The facility is located in a highly active commercial area so the impact to the environment associated with the physical presence and activity of people using the facility for refuelling is not considered to have an increased level of impact to the environment in that area of Milford Sound. However, the storage, dispensing and potential for a diesel leak/spill event has the potential to cause an adverse effect on the environment, and is recognised by Allied.

Operational drips and minor spillages during routine dispensing operations are likely (in fact typical), however, the volume is typically minor and would be captured by the site infrastructure and passed through an interceptor before discharge (suspected likely to ground). This is then routinely maintained and cleaned out. The underground components (tank and pipework) are all double walled so the likelihood of a leak entering the environment is very low. In the unlikely event that a leak occurs that breaches the secondary containment, remote monitoring of the system will trigger an emergency response to investigate, and if required, remediation of the area.

The mitigation measures that Allied have installed/initiated at the site, coupled with the 3-monthly, 6-monthly inspections, reduce the potential for an adverse effect to occur for the operational refuelling facility.

#### 6.0 Limitations

This report has been prepared by Pattle Delamore Partners Limited (PDP) on the basis of information provided by Allied Petroleum Limited and publicly available information. PDP has not independently verified the provided information and has relied upon it being accurate and sufficient for use by PDP in preparing the report. PDP accepts no responsibility for errors or omissions in, or the currency or sufficiency of, the provided information.

This report has been prepared by PDP on the specific instructions of Allied Petroleum Limited for the limited purposes described in the report. PDP accepts no liability if the report is used for a different purpose or if it is used or relied on by any other person. Any such use or reliance will be solely at their own risk.

© 2022 Pattle Delamore Partners Limited

Yours faithfully

#### PATTLE DELAMORE PARTNERS LIMITED

Prepared by

Scott Wilson Technical Director – Contaminated Land



SOURCE: 1. AERIAL IMAGERY (FLOWN 2018/2019) SOURCED FROM THE LINZ DATA SERVICE AND LICENCED FOR RE-USE UNDER THE CREATIVE COMMONS ATTRIBUTION 4.0 INTERNATIONAL LICENCE 2. CADASTRALTOPOGRAPHICAL INFORMATION AND INSET SOURCED FROM THE LINZ DATA SERVICE https://data.lice.gov.trz/ AND LICENSED FOR RE-USE UNDER THE CREATIVE COMMONS ATTRIBUTION 4.0 INTERNATIONAL LICENCE.

FIGURE 1 : SITE LOCATION

SCALE : 1:2,000 (A4) 0 10 20 40 60 METRES

C02294101\_FIGURE1\_MILFORD\_CAFE.mxd 20/10/2022 ISSUE 1





Photograph 1: Photo showing the fuelstop layout



Photograph 2: Photo showing the tank slab (two manholes above the UST). Photo also shows the location of the kiosk.



Photograph 3: Photo showing one of the monitoring wells



Photograph 4: Photo showing the second monitoring well

## APPROVED COMPLIANCE CERTIFIERS LTD

Plain Speak WORKSAFE Approved Compliance Certification previously Approved HSNO Certification Ltd PO Box 7134 DUNEDIN 9040

Greg Quin: office@approvedcompliancecertifiers.co.nz Web: www.tst.co.nz

## COMPLIANCE CERTIFICATE STATIONARY CONTAINER SYSTEM

Disclaimer: This certificate is issued by Greg Quin, being an individual compliance certifier authorised by WorkSafe New Zealand under, and in accordance with, regulation 6.8(2)(a) to (d) of the Health and Safety at Work (Hazardous Substances) Regulations 2017

Issued in accordance with regulations 6.23 and 17.91 of the Health and Safety at Work (Hazardous Substances) Regulations 2017. This certificate certifies that the requirements prescribed in regulation 17.91 for a stationary container system compliance certificate have been met

Company# / NZBN: 563789 / 9429038924330

Certificate No:

000352-00042111

PCBU Issued To: Allied Petroleum Limited PO Box 31201

Christchurch 8444 03 341 2790 027 244 4027 Sean Rooney sean.rooney@alliedpetroleum.co.nz Site Location: -44.67247890 167.92695599 Allied Milford Unmanned FuelStop 20.6KL Dual Comp Tank 79 Milford Sound Highway State Highway 94 Milford Sound 9679 03 341 2790 027 244 4027

Stationary Container Details:

| i dinor   |   |   |   |  |  |
|---|---|---|---|--|--|
| Belowground Fibreglass Double Wall                                    |   |   |   |  |  |
| SWI:Management of pre-2006 Stationary Container Systems up to 60,000L |   |   |   |  |  |
| Greentank   | Date of Manuf:  | 2005  |   |  |  |
| 20,600L = 10,300L+10 <mark>,300L</mark>                               | Manuf Ref:  | Unknown   |   |  |  |
| 20,000L = 10,000L + <mark>10,000L</mark>                              |   |   |   |  |  |
|   | Belowground Fibreglass Double Wall<br>SWI:Management of pre-2006 Station<br>Greentank<br>20,600L = 10,300L+10,300L<br>20,000L = 10,000L + 10,000L | Belowground Fibreglass Double Wall         SWI:Management of pre-2006 Stationary Container Systems u         Greentank       Date of Manuf:         20,600L = 10,300L+10,300L       Manuf Ref:         20,000L = 10,000L + 10,000L       Manuf Ref: | Belowground Fibreglass Double Wall         SWI:Management of pre-2006 Stationary Container Systems up to 60,000L         Greentank       Date of Manuf: 2005         20,600L = 10,300L+10,300L       Manuf Ref: Unknown         20,000L = 10,000L + 10,000L |  |  |

Equipment Details:

Supplying Disp 1/2 (91/D) Compac Laser LL40P dual disp serial: 16E-14384001. Electrical coc for install Petrotec PS4756-9-6-16 dated 9/6/2016.

Class:Substance:3.1A:Petrol 91 Regular in 10.3KL comp (SFL 10KL)3.1D:Diesel 10.3KL comp (SFL 10KL)

Xum

Max Tank Capacity 10,300 litres 10,300 litres

Details of certification:

PCBU is responsible for maintaining compliance throughout duration of this certificate

Certificate term issued to SWI 2018 - Validity Periods of Compliance Certificates for Stationary Container Systems. This certificate remains in force until the expiry date unless any of the components specified in the above Stationary Container System is repaired, altered, relocated or there is a change of service in respect of the contents of the container.

#### PCBU is responsible for maintaining the facility in a compliance state throughout duration of this certificate

Issue Date: 28 Aug 2020 Date Comes into Force: 28 Aug 2020 Expiry Date: 28 Aug 2023

Greg Quin:

Compliance Certifier Registration **000352** Previous cert number: 000352-00036288 HSNO



## APPROVED COMPLIANCE CERTIFIERS LTD

Plain Speak Compliance Certification previously Approved HSNO Certification Ltd PO Box 7134 DUNEDIN 9040 Greg Quin: office@approvedcompliancecertifiers.co.nz Web: www.tst.co.nz



## **COMPLIANCE CERTIFICATE - LOCATION**

Issued in accordance with regulation 6.23 and regulation(s) 10.34 of the Health and Safety at Work (Hazardous Substances) Regulations 2017. This certificate certifies that the requirements prescribed in regulation 10.34 for a location compliance certificate have been met

Company# / NZBN:

563789 / 9429038924330

PCBU Issued to: **Allied Petroleum Limited** PO Box 31201

Christchurch 8444 0274 346 831 Sean Rooney sean.rooney@alliedpetroleum.co.nz Certificate No: 000352-00043022

Site Location: -44.67245100 167.92695700 Allied Milford Unmanned Retail Facility Site Milford Sound Highway State Highway 94 Milford Sound 9646 0274 346 831

Class /GHS 3.1A: GHS Flammable liquids Category 1

Substance: Petrol 91 Regular in 10.3KL comp (SFL 10KL) Maximum Quantity (SFL): 10,000 litres

Details of Certification:

3.1D 10.3KL D comp (SFL 10KL) is not to be shown on Location compliance certificate. Electrical cert Elteco Peter MacMillan current until 22/2/2025.

Hazardous substance Inventory to be maintained and kept current

Safety data sheets to be held for each substance and kept within 5 years of issue date

Signage to be maintained as readable and in good condition

Extinguishers to be kept within test tag date annually. Site Plan to be kept current if any changes are made to site

Controlled zone and Hazardous Area to be managed inline with site plan.

Maintain volume related separation distances inline with Sched 12 Tables of Health and Safety at Work (Hazardous Substances) **Regulations 2017** 

All staff training records to be maintained inline with requirements in regs 4.5 and 4.6.

The certificate becomes INVALID when any alteration to volumes, substances or facilities is undertaken. PCBU is responsible for maintaining facilities in a compliance state throughout duration of this certificate

Issue Date: 24 Feb 2022

Date Comes into Force: 26 Mar 2022

Expiry Date: 26 Mar 2023

Greg Quin:

**Compliance Certifier Registration** Previous cert number: 000352-00042552

000352

Disclaimer: This certificate is issued

 $\mu$ uin, being an individual compliance certifier authorised by WorkSafe New Zealand under, and in accordance with, regulation 6.8(2)(a) to by Greg (d) of the Health and Safety at Work ( ous Substances) Regulations 2017 azard