



11 February 2019

## **Submission on:**

### **New Zealand's potential accession to IMO: MARPOL Annex VI**

## **Introduction**

This submission is limited to the low sulphur fuel questions on Page 10 of the discussion paper, and in particular Q14 and Q15. These responses may have implications for other questions, but they are for others to answer.

## **Background**

Blended Fuel Solutions NZ Ltd (BFSNZ) has an ongoing relationship with US company Alternative Petroleum Technologies (APT) ([www.altpetrol.com](http://www.altpetrol.com)) that has a product Sulfex™ ([www.altpetrol.com/sulfex/](http://www.altpetrol.com/sulfex/)) relevant to the MARPOL low sulphur requirements.

Sulfex™ can desulphurise fuels with lower operating and capital expenditure costs when compared with conventional hydro-desulphurization. This is in part because it operates under relatively modest temperature and pressure conditions.

## **Status of development**

APT currently has both small scale batch (100 gallons) and continuous (1-3 gallons per hour) production plants for desulphurising distillates. These are in the process of scale up.

MFO has proven to be more difficult because of the viscosity and the need to heat it without impacting on the reagents. This has now been demonstrated in the lab, and we are in discussions with NZ interests over funding to build a pilot plant.

If successful this should provide low sulphur MFO at a discount off either scrubbers or low sulphur diesel.

## **Biofuels**

The other option for low sulphur marine fuels is a bio-crude. These would become more competitive if other low sulphur solutions are going up in price. A marine bio-

crude could need more limited processes than other biofuels thus potentially making it competitive.

A further product from APT could facilitate this - Emulsified Biodiesel ([www.altpetrol.com/emulsified-biodiesel/](http://www.altpetrol.com/emulsified-biodiesel/)) that both could help manage water content in the biofuel and reduce the high NOx.

### Further information

If you require any further information on either opportunity please do not hesitate to be in contact on 027 444 3015.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Leigh Ramsey', with a stylized flourish at the end.

Leigh Ramsey  
Managing Director

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