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Member Q&A on Red Diesel and Diesel Fuel Issues

This Q&A has been prepared for NFU members' guidance only, and is based on the NFU's current understanding of the situation. NFU members should check their own contracts carefully and are advised to take independent professional advice on their legal position.

Background

NFU members are reporting that they are suffering issues with machinery powered by red diesel and diesel. Reported issues include poor machine performance, blocked filters on storage tanks and machines, replacement of filters before schedule (sometimes after only a few hours of use) with resulting down time.

We have received the greatest number of reports from members in East Anglia, South East England and Northern England. We have received few reports to date from Wales and the West Midlands. Our counterparts in NFU Scotland report that significant numbers of their members from the Borders to Aberdeen are experiencing problems.

What is bio diesel?

All red diesel and diesel supplied to the UK market is likely to contain some content produced from renewable sources. Fatty Acid Methyl Esters (FAME) is the renewable bio fuel substance added to diesel on sale to the UK market. FAME is produced from renewable materials such as recycled cooking oils, tallow fats and plant oils.

Why is there renewable fuel content in diesel?

The UK government is committed to a reduction in the emission of greenhouse gases and has set targets for the use of renewable content in fuel used for transport purposes. Targets for the UK are set under the Renewable Transport Fuel Obligation (RTFO). The current target under the RTFO is 9.75% for fuels derived from renewable sources across the total mix of transport fuels used in the UK.

The specifications of red diesel and diesel are set by British and EN standards. Under the current standards FAME content up to a maximum of 7% is permitted in both red diesel and diesel. Other types of fuel may have higher renewable content in order to reach the overall renewable fuel target of 9.75%.

Has the amount of FAME in red diesel and diesel increased compared to the situation in the past?

The overall RTFO target is planned to increase each year until 2032 when a final target of 12.40% is reached. In previous years the FAME content of red diesel and diesel supplied to the UK market was unlikely to be at the maximum 7% permitted under British and EN standards. This is because in the past:

1. The overall RTFO target was lower.



2. Potentially, producers also had slack in the amount of renewable content in other types of fuel which was used to meet the overall target without the need for renewable content in diesel to be so high.

Characteristics of FAME?

There are several characteristics of FAME which may cause problems for farm machinery and fuel tanks and which members need to be aware of and manage. These characteristics are set out below. Please note, however, that we do not know yet what is causing the recent issues with machinery powered by red diesel and diesel.

- FAME is hygroscopic, meaning it attracts and holds onto water from the air. This results in an increased potential for the growth of bacteria, mould and algae in fuel tanks, particularly in the summer months.
- FAME is a powerful solvent and can cause degradation to many common rubbers, plastics and surface coatings that may be a part of farm machinery or storage systems.
- Residual deposits can cause clogging in filters.
- FAME reduces fuel stability; therefore fuel may degrade sooner due to hydrolysis and oxidation.
- Under colder conditions paraffin waxes in the fuel can solidify, blocking filters and leading to fuel starvation and engine shutdown.

What can be done to avoid these problems?

- Conduct a tank inspection to check the condition of construction material, pipework and seals replacing any damaged components. It is advisable to replace all fuel seals as a one-off precaution before your first delivery.
- Conduct subsequent and frequent checks to maintain good condition.
- Ideally before the delivery of biofuel undertake a thorough, professional clean of storage tanks and systems.
- Reduce moisture levels in storage tanks. Ensure tanks are clean and dry and not exposed to leaks or rain run-off. Keeping tanks topped up reduces the amount of air in the tank from which the fuel can absorb water. Some fuel delivery companies can conduct a water content test.
- Regularly inspect and replace fuel filters.
- If sediment or bacterial growth is discovered in tanks, seek professional help to remove – applying fungicides or microbiological killers may do more harm than good. Note that when filling a tank, incoming flow can disturb residual deposits at the bottom of the tank dispersing them throughout the fuel. Conduct a tank inspection to check the condition of construction material, pipe work and seals, replacing any damaged components. It is advisable to replace all fuel seals as a one-off precaution before your first delivery of bio fuel
- Conduct subsequent and frequent checks to maintain good condition.

What do I do if I experience a problem with fuel?

- Please ring CallFirst for advice on 0370 845 8458. This will also allow the NFU to monitor the issues experienced and to better understand the nature and geographical spread of the problem.
- You may wish to inform your supplier of the problem and ask that your fuel is tested. If the fuel supplied caused a blockage which meant a filter had to be replaced, you may also wish to consider asking for the filter to be tested to help identify the substance causing the blockage.
- You should keep a record of all losses incurred and copies of all relevant documentation (for example, your fuel supply contract, invoices, delivery notes). You might also want to consider retaining a sample of the fuel. If you have any discussions with your fuel supplier, you should keep a detailed note of the conversation.
- Fitting finer filter systems to the storage tank may help to prevent fuel filter blockages in vehicles as may the use of detergent-dispersant additives.

What else should I do at present?

It is possible that the losses that you have suffered may be covered by your insurer. You should notify your insurer as soon as possible about what has happened. If your insurer is NFU Mutual, you should notify your Group Secretary. You should follow any instructions given to you by your insurer in terms of how you should proceed with your claim.

I have not yet paid for the fuel – do I legally have to pay for the fuel that has been supplied?

This will depend largely on the terms and conditions on which you bought the fuel. If you do not pay for the fuel, there is a risk that you will be in breach of contract.

You may want to discuss the payment for the fuel with the fuel supplier. You should keep a note of any conversations that you have.

Should I have my machinery repaired, or hire in alternative equipment?

You will need to make a decision about whether or not your machinery needs urgent or immediate repair, or whether you need to hire in alternative equipment.

You must do what you can to mitigate any losses that you have suffered, which means that you should try to minimise the losses as far as you reasonably can.

You should also discuss the issue of repair, or hiring in alternative equipment, with your insurer.

What is the NFU doing?

Since the issue was first raised:

- We have highlighted the problem to fuel producers, fuel suppliers and buying groups, other stakeholders and the Department for Transport.
- The NFU's Legal Assistance Scheme is providing funding towards tests and reports as part of a wider investigation and we are working closely with the legal panel firm Tees to identify options for our members.

- We have set up a survey on [NFU online](#). We are asking members to complete the survey every time they experience a fuel quality problem. The data collected will aid our understanding of the depth and geographical extent of the issue and help investigations into the causes.

Next steps

The cause of the fuel problems that members are experiencing has not yet been identified. The NFU is demanding that further investigations are carried out to identify the root cause and solution as soon as possible. To further this aim the NFU and NFUS attended a meeting of the British Standards Institute (BSI) task force looking at fuel quality issues in December 2019. One outcome from the December 2019 meeting is that a specialist group has been set up to look at filter blocking in agricultural vehicles. This group includes representatives from NFU, BSI, DfT, the fuel producers and distributors. It is scheduled to meet in February 2020.

The NFU will update members as soon as more information is available.

Further information on red diesel is available on NFU online [here](#) and in the NFU Business Guide on Red Diesel [here](#).