

From: Hughes, Seamus
To: ["Edmund Ward"](#)
Cc: ["Teri Clifton"](#); [Jane Pierce](#); [Wightman, Stuart](#); [Marten, Lucy](#); [Willis, Adele](#); [Briggs, Peter](#)
Subject: NIRHI potential enforcement test cases
Date: 23 November 2016 16:01:00
Attachments: [Test Cases for DSO.DOCX](#)
[image001.png](#)
[image002.gif](#)

Edmund

In our meeting this morning we touched on the point of DfE engaging independent junior council to provide advice on a number of possible test cases to assist the process of determining if enforcement action would have a likelihood of success in the courts. The attached table provides 5 test cases that we propose to use in this regard. In order for this to be taken forward with junior council we require the application data for these applications and I would be grateful if this could be provided.

Many thanks

Regards

Seamus

Seamus Hughes

Energy Efficiency
Department for the Economy
Netherleigh
Massey Avenue
Belfast, BT4 2JP
Tel: 028 9052 9532 (ext: 29532)
TextRelay: 18001 028 9052 9532
Web: www.economy-ni.gov.uk



[NI Year of Food & Drink 2016](#)

Please consider the environment - do you really need to print this e-mail?

TEST CASE 1: Heat use is not economically justifiable (Drying Poultry Manure)

The site is a poultry farm and carries out the production of eggs for broiler hatching. There are 130,000 birds on site.

The site contact stated that 45 tonnes of poultry manure are collected and dried per week. This is sold to be pelletised and then sold as manure. The manure is collected by a mechanical conveyor system and dried using a one pass drying system.

There are six woodchip boilers on site each has their own buffer vessel. Hot water from the buffer vessel is used to supply 6 separate heaters batteries. Hot air is blown across belts containing manure within a drying chamber.

Based on meter readings it is estimated that the amount of heat used for each tonne of manure produced is approximately 2MWh. This cost of this is approximately £120 per tonne of manure in RHI payments. If this were to be carried out using oil or LPG it would cost approximately £100 per tonne of manure.

The wholesale cost of chicken manure is difficult to ascertain. Initial enquiries indicate the cost of manure to be between £10 and £40 per tonne depending on moisture content. The signatory indicated that he needed to dispose of the manure somehow and there was a cost in doing that. However it is based on the figures above it is hard to see how this could be a commercially viable process unless the heat source was waste heat from an industrial process, CHP or from Biogas.

(Cat 2 17330/17331/17333/17334/17335/17336)

Multiple Boilers – one or two boilers could have been employed rather than the six used.

Wasteful / inefficient - this is an extremely inefficient operation and wastes large amounts of heat.

Heat use is not economically justifiable – it is costing around £120 per tonne to dry the manure which is then sold on for a much lower price (£10-£140).

The scheme participant is not complying with their ongoing obligations and are ‘*generating heat for the predominant purpose of increasing their periodic support payments*’ (regulation 33(p)).

Actions:

- Suspend payments under (regulation 44),
- Revoke accreditation of all six boilers (regulation 46), and
- Seek to recover payments made to date (regulation 47).

TEST CASE 2: Parasitic Wood Drying

This site has two 99 kW KWB boilers both serve a wood chip drying floor. One of the boilers also supplies heat to a domestic dwelling and an outbuilding. However the outbuilding is not included in the RHI application.

The boilers, buffer vessels and metering appeared to conform with RHI requirements.

This site dried woodchip using large amounts of heat. This was not sold commercially but simply recycled back into the boilers that supplied the two drying floors. The wood chip on the floor was observed to be very dry and the floor was operational.

The signatory was asked several times if wood chip was sold commercially but he said that this was not the case and that all the dried woodchip was recycled back into the boilers as fuel.

The only useful load was two radiators in the outbuilding used to repair two cars and the relatively large domestic dwelling. This is considered a gross waste of heat with the sole purpose of generating RHI payments. It should be also classed ineligible as the sole use of the heat is for the domestic dwelling.

The system appeared very well engineered, designed and installed.

(Cat4 14695/15950)

Heat use is not economically justifiable – wood is dried simply to be consumed on site by the same boilers (i.e. parasitic use). This constitutes double subsidy.

Multiple Boilers – one boiler could have been employed rather than one.

Wasteful / inefficient - this is an extremely inefficient operation and wastes large amounts of heat.

The scheme participant is not complying with their ongoing obligations and are '*generating heat for the predominant purpose of increasing their periodic support payments*' (regulation 33(p)).

Actions:

- Suspend payments under (regulation 44),
 - Revoke accreditation of both boilers (regulation 46), and
- Seek to recover all payments made to date (regulation 47).

TEST CASE 3: No Eligible Non Domestic use (Domestic only)

The site is a large domestic house with a garage block (triple garage) some 20 m from the house. The garage is described in the application as an “office, warehouse and workshop. In reality the “office” is a small store room measuring 2.5m x 5 m containing an untidy assortment of objects including bicycles, a roll of insulation and a high chair.

The “warehouse/workshop” is the rest of the garage which is mostly filled with bits of kitchen unit. Insulation rolls and the boiler/buffer tank and fuel store. The amount of free “workshop” area is approximately 3m x 5 m.

There are 2 domestic radiators in the garage area and 2 more in the “office”. These were observed to be hot.

There is a single 99 kW biomass boiler, pellet store and 1500 l buffer tank located in the garage. The boiler supplies space heating and domestic hot water to the house and the garage...

90% of the heat use is for supplying space and hot water heating to the very large house. The remaining 10% is used to heat a garage with no evident non-domestic usage unless the garage is rated as commercial premises.

There is a significant discrepancy between the installed plant and the schematic in that there is a backup oil boiler connected to the supply side of the buffer tank. This does not have a heat meter.

The pipework in the garage was observed to be uninsulated.

(Cat4 17303)

No Eligible Non Domestic Use – unless the garage is rated as commercial premises which appears unlikely.

The scheme participant is not complying with their ongoing obligation to ‘*ensure their accredited installation continues to meet the eligibility criteria*’ (regulation 33(e)).

Actions:

- Suspend payments under (regulation 44),
- Revoke accreditation of all six boilers (regulation 46), and

Seek to recover payments made to date (regulation 47).

TEST CASE 4: Heat Use not as Declared / Possible Fraud

The site carries out the rearing of poultry. There is also a food distribution business.

There are 3 x 99 kW pellet boilers that serve three poultry sheds.

There were no significant discrepancies between the system as described in the RHI application and that observed during the audit. The system appeared well engineered, designed and installed.

There are also 2 x 40 kW boilers that serve the food distribution building, office and also the domestic house. The application is under review. There were no significant discrepancies between the system as described in the RHI application and that observed during the audit. The system appeared well engineered, designed and installed.

There were also 3 sets of two 99kw boilers installed in a plant room in the middle of a construction site. In the RHI applications for these boilers are described as located in a potato washing and prep building. This is not the case. They are in an isolated plant room.

At the time of the visit they were not connected to any meaningful load (one set was connected to a fan heater inside the plant room and another set was connected to a small DHW cylinder) and were not operational. They are connected to underground pre-insulated mains that run to three poultry houses currently under construction. This implies that this was always intended to be what the boilers are to serve and that the description in the application is false.

(Cat 4 18543/18547/18554)

Fraud / False Declaration –
Scheme participant appears to have made a false description of potato washing as the end load in the original RHI application.

All three boiler sets were connected to pre-insulated pipes that terminated within three poultry units under construction. This appears to be a deliberately false description of the intended use of the installation in order to receive RHI payments.

No Eligible Non Domestic Use – no meaningful heat load.

Suspected Fraud – initiate proceedings.

The scheme participant is not complying with their ongoing obligation to '*ensure their accredited installation continues to meet the eligibility criteria*' (regulation 33(e)).

Actions:

- Suspend payments under (regulation 44),
- Revoke accreditation of all eight boilers (regulation 46), and

Seek to recover payments made to date (regulation 47).

TEST CASE 5: Parasitic Wood Drying

The site is an agricultural farm provided with facilities to store and treat woodchips, with warehouses to accommodate animals and with farmhouses (cottages) where the farmers' families live.

There are 7 x 99KW biomass boilers on the NI RHI Scheme used throughout the whole year at full load 24/7. It was reported that the entirety of the woodchips treated on site is solely used to supply the 7 boilers on site (i.e. there is no surplus for any commercial sale).

During the survey it was observed via the use of infra-red thermal cameras that the moisture content of the wood chips stored in the warehouse varies significantly as wet wood chips are mixed with dried (i.e. already treated) wood chips.

Boilers 1 and 2 serve two poultry sheds. Boiler 3 is located in a separate boiler house and supplies LTHW to a heater located in the same building, used sporadically for process heating and to a number of heat exchangers which are continuously in operation and whose ultimate scope is to provide DHW and space heating to the farmer's cottages.

Boilers 4, 5, 6 & 7 are located in the same building and they are only used for purpose of drying wood chips to be used as main fuel of all seven boilers installed on site.

(Cat4 17635/17636/15955)

Heat use is not economically justifiable – wood is dried simply to be consumed on site by the same boilers (i.e. parasitic use). This constitutes double subsidy.

Multiple Boilers – one boiler could have been employed rather than one.

Wasteful / inefficient - this is an extremely inefficient operation and wastes large amounts of heat.

The scheme participant is not complying with their ongoing obligations and are '*generating heat for the predominant purpose of increasing their periodic support payments*' (regulation 33(p)).

Actions:

- Suspend payments of all 7 boilers under (regulation 44),
 - Revoke accreditation of all 7 boilers (regulation 46), and
- Seek to recover all payments made to date (regulation 47).