

Notice of variation with introductory note

Environmental Permitting (England & Wales) Regulations 2010

RWE Npower plc

Aberthaw Power Station
The Leys
Aberthaw
Near Barry
Vale of Glamorgan
CF62 4ZW

Variation application number

EPR/RP3133LD/V005

Permit number

EPR/RP3133LD

Aberthaw Power Station

Permit number EPR/RP3133LD

Introductory note

This introductory note does not form a part of the notice

The following notice gives notice of the variation of an environmental permit.

This variation notice amends the permit to allow the burning of Processed Fuel Oil (PFO) as an alternative to, or in a blend with, Heavy Fuel Oil (HFO). PFO is derived from waste lubricating oils but when produced in accordance with the Environment Agency/WRAP Quality Protocol for Processed Fuel Oil it ceases to be waste. This means it can be burned as a fuel without the application of the provisions of waste legislation.

The schedules to this variation specify the changes made to the original permit. Table S1.1 is amended to account for the use of Processed Fuel Oil in the description of the limits of the specified activity. Table S3.1 is amended to include PFO and the specification to which the PFO must adhere is set out in that table. The specification reflects that provided in the Application and is consistent with that set out in the Quality Protocol. The Operator is required to ensure that the PFO adheres to the Quality Protocol at all times. PFO which does not meet the terms of the Quality Protocol is not permitted under this variation of the permit. Table S3.1 is also amended as a result of an Environment Agency initiated variation to remove the sulphur limit for gas oil which applied up until 2007 as this provision is now superfluous.

The status log on the following page sets out the permitting history, including any changes to the permit reference number.

Status log of the permit

Description	Date	Comments
Application EPR/RP3133LD received	Duly made 31/03/06	Application for permit received
Additional information requested	26/07/06	
Additional information received	04/10/06, 01/11/06, 10/11/06, 05/12/06, 01/03/07, 16/03/07, 08/08/07, 10/08/07, 22/08/07, 05/09/07, 11/09/07	
Permit determined EPR/RP3133LD	21/12/07	Permit issued
Variation determined GP3635XF	09/01/08	Variation issued
Variation application EPR/RP3133LD/V003	Duly made 05/03/10	
Variation determined EPR/RP3133LD	13/05/10	Variation issued
Variation application EPR/RP3133LD/V004	Duly made 31/01/11	
Further information received	23/03/11	Addendum to application
Variation determined EPR/RP3133LD	20/06/11	Variation issued
Variation application EPR/RP3133LD/V005	Duly made 08/12/11	
Variation determined EPR/RP3133LD	06/02/12	Variation issued

Other Part A installation permits relating to this installation

Operator	Permit number	Date of issue
RWE Npower plc	DP3432SW	30/03/07
RWE Npower plc	BP3339BH	04/05/07

Other existing Licences/Permits/Registrations relating to this site

Holder	Reference Number	Date of issue
RWE Npower plc	21/57/31/0040	30/03/07

End of introductory note

Notice of variation

Environmental Permitting (England and Wales) Regulations 2010

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2010 varies

Permit number

EPR/RP3133LD

Issued to

RWE Npower plc

Whose registered office is

Windmill Hill Business Park

Whitehill Way

Swindon

Wiltshire

SN5 6PB

Company registration number 3892782

To operate a regulated facility at

Aberthaw Power Station

The Leys

Aberthaw

Vale of Glamorgan

CF62 4ZW

To the extent set out in the schedules.

The notice shall take effect from 06/02/12.

Name

Date

M Bischer

06/02/2012

Authorised on behalf of the Environment Agency

Schedule 1 – conditions to be deleted

None

Schedule 2 – conditions to be amended

The following conditions are amended as a result of the application made by the operator.

2.1.1 The operator is authorised to carry out the activities specified in schedule 1 table S1.1 (the “activities”).

Table S1.1 activities		
Activity listed in Schedule 1 of the PPC Regulations	Description of specified activity	Limits of specified activity
Section 1.1 Part A(1)(a)	Burning any fuel in an appliance with a rated thermal input of 50 megawatts or more.	Receipt of coal at the coal mills, the supply of coal, Processed Fuel Oil (PFO), recovered char, biomass, oil and propane to the furnace, subject to the limitations imposed in Schedule 3 Tables S3.1 and S3.2, through to the discharge of exhaust gases from the stack, flue gas conditioning with sulphur trioxide and ammonia, ash and sulphur dioxide removal from the flue gases, the export of steam to the steam systems in 3 boiler units and 3 open cycle gas turbines and any associated activities necessary to maintain the operation of the plant and fuel supplies.
Section 5.3 Part A(1)(c)(ii)	Treatment of wastewater from the flue gas desulphurisation plant.	Discharge of seawater from the Flue Gas Desulphurisation process to the discharge from the installation.
Section 3.5 Part B (f)	Pulverised fuel ash (PFA) handling and storage.	Removal of ash from the electrostatic precipitators to despatch from the installation or to treatment in the ash reprocessing plant.
Section 4.8 Part B (a)	The storage of anhydrous ammonia.	Receipt of anhydrous ammonia through to injection into the boiler flue gas ducts.
Directly Associated Activity		
Directly associated activity	Fuel storage	Receipt of coal, oil, propane and biomass through to discharge from the mill hoppers or feed to the furnace respectively.
Directly associated activity	Ash reprocessing	From receipt of ash at the reprocessing plant to dispatch to customers and transfer of char to the boilers subject to the limitation imposed in Schedule 3 Table S3.3.
Directly associated activity	Surface water drainage	Handling and storage of site drainage until discharge from the site surface water system.
Directly associated activity	Water treatment	From receipt of raw materials to dispatch to chemical effluent and dirty water system.
Directly associated activity	The generation and export of electricity	The receipt of steam at the steam turbines to the export of electricity to the national grid station and the direct generation of electricity from the gas turbines.
Directly associated activity	The use of water from the Bristol Channel for cooling and the seawater FGD process.	The pumping and filtering of the water, its use in the condensers and for auxiliary cooling, the seawater FGD process and discharge of the water back to the Bristol Channel via the seawater treatment plant for FGD process water.
Carbon capture (<10MW) pilot plant	Removal and recovery of SO ₂ and CO ₂ from power station flue gas	From flue gas tap-off point to return of treated and recovered gases to power station flue gas system, including the storage, use and regeneration of amine absorbents
Gas oil-fired combustion plant	Supply of steam to the carbon capture (<10MW) pilot plant	Includes storage of gas oil

2.3.1 The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1 table S1.2, unless otherwise agreed in writing by the Agency.

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application	The response to sections 2.1 and 2.2 in the Application.	30/03/06
Schedule 4 Notice Request dated 26/07/06	Response to sections 2.1 f) and h) detailing combustion and seawater FGD process controls.	06/10/06, 01/11/06, 10/11/06, 1/03/07 and 16/03/07, respectively
Receipt of additional information to the application	Further responses to sections 2.1 f), h) and 2.9 c) of the Schedule 4 Notice detailing abatement measures associated with nitrogen oxides emissions control (current status of TIB implementation) and main stack noise emissions respectively.	05/12/06
Receipt of additional information to the application	Further information provided relating to the baseline marine monitoring survey methodology and survey results, the design and operation of the ash reprocessing facility.	8/08/07, 10/08/07 and 22/8/07
Variation application EPR/RP3133LD/V004	Section 2.1, 2.5.2, 2.16, Appendix A and Appendix B of the supporting information	31/01/2011 (duly made)
Variation application EA/EPR/RP3133LD/V005	Table 1 (PFO specification) and section 2.2 of document entitled 'Application for a variation to Environmental Permit RP3133LD, reference number EA EP RP3133LD Supp Doc V006, dated December 2011.	08/12/2011 (date on which application was duly made)

The following conditions are amended as a result of the application made by the operator and following an Environment Agency initiated variation.

2.3.2 No raw materials or fuels listed in schedule 3 table S3.1 shall be used unless they comply with the specifications set out in that table.

Table S3.1 Raw materials and fuels	
Raw materials and fuel description	Specification
Low volatile content coal	As described in the application
Heavy Fuel Oil	≤ 1% sulphur w/w
Gas Oil	≤ 0.1% sulphur w/w
Biomass fuels	as defined in Article 2(11) of the EU Directive 2001/80/EC) and included in the application or otherwise agreed in writing with the Agency.
Processed Fuel Oil (PFO)	As defined in Table 1 of document entitled 'Application for a variation to Environmental Permit RP3133LD', reference number EA EP RP3133LD Supp Doc V006, dated December 2011. Processed Fuel Oil may only be accepted if it has been produced under and in accordance with the Environment Agency/WRAP Quality Protocol for Processed Fuel Oil.
Caustic soda	≤ 0.15 ppm mercury w/w

Schedule 3 – conditions to be added

None