



Mr Jeffrey Edwards  
Natural Resources Wales  
Rivers House  
St Mellons Business Park  
St Mellons  
Cardiff  
CF3 0EY

Your ref:  
Our ref: 20150420 CB

20<sup>th</sup> April 2015

Dear Mr Edwards,

**Re: Ffos-y-fran Land Reclamation Scheme - Schedule 5 Notification**

Further to the meeting held at our request on the 25<sup>th</sup> March 2015 to discuss the circumstances surrounding what may or may not have resulted in potential breaches in suspended solids levels discharged on the 15<sup>th</sup> and 16<sup>th</sup> February 2015 from Water Treatment Area WB ; as agreed please find the Schedule 5 notification in respect of the anomalous results (attached) and an explanation summary of the investigations carried out and discussed with you at the meeting, for your consideration.

As we discussed, Miller Argent (South Wales Limited) had been pumping water from the base of the excavation area in Cut 12, at a controlled rate to WB. The water is pumped to a series of four pre-settlement ponds located upstream of WB, which then discharge into the main attenuation pond at WB before flowing into the final polishing lagoons prior to being discharged from the site via the consented outlet point. These pre-settlement ponds were designed and constructed to allow any suspended solids in the water to settle out prior to reaching the attenuation pond and to facilitate this a flocculant station had been set up at the first pond which uses non-ionic flocculent. These pre-settlement lagoons are de-silted on an 'as required' basis and at the time of the incidents silt deposition levels in the base of the ponds was relatively low and there was plenty of settlement capacity available.

On the evening of the 15<sup>th</sup> February 2015 and the morning of the 16<sup>th</sup> February 2015, although we were not pumping to WB at the time, the lagoons were discharging and the turbidity probe located in the outlet channel of WB's polishing lagoons indicated elevated levels of suspended solids, which coincidentally displayed levels of 57ppm on both occasions. In line with Miller Argent's procedures, on both occasions an automatic alarm was activated and a text message was received by our Security Officer in the gate house. This message was immediately passed onto the relevant pumpsmen on Site, who were then required to immediately visit WB to investigate the alarm and take a physical sample of the water from the consented outlet point for laboratory analysis. As required, samples were taken by the pumpsmen which were then delivered to Miller Argent's Environmental Liaison Officer, who labelled both samples and sent them off to the laboratory for analysis. For your information, Miller Argent had just re tendered it's water monitoring requirements and these samples were the first samples carried out by the new laboratory ('Lab A'), who are fully accredited to carry out this type of work.

The results came back from 'Lab A' on the 4<sup>th</sup> March 2015 which indicated that the suspended solids level on the 15<sup>th</sup> February 2015 was 73ppm and the level on the 16<sup>th</sup> February 2015 was 140ppm (compared with the readings of 57ppm indicated by the turbidity probe). In line with Miller Argent's permit requirements an email was sent by Miller Argent to the NRW on 5<sup>th</sup> March 2015, informing the NRW of these elevated readings. Immediately these results were received by Miller Argent their validity was questioned as they were significantly higher than the indicated probe readings for suspended solids recorded at the same time. This is very unusual due to the fact that historically the actual laboratory results are always significantly lower than the indicated probe results for suspended solids recorded by the Site and therefore these results do not correlate as anticipated.

Miller Argent contacted 'Lab A' to inform them of the anomaly and asked the laboratory to carry out a re-test analysis on the samples to confirm their original results. As requested 'Lab A' re-tested both samples and new results were provided to Miller Argent on 5<sup>th</sup> March 2015 which, in the opinion of Miller Argent, cast more doubt on the validity of the original results. The re-tested sample for the 15<sup>th</sup> February 2015 gave a



Certificate No. FS 23226



Certificate Numbers FS 23226, EMS 581256

new reading of 57ppm (compared with the original reading of 73ppm and a probe reading of 57ppm) and the new sample for the 16<sup>th</sup> February 2015 gave a new reading of 103ppm (compared with the original reading of 140ppm and a probe reading of 57ppm). When questioned, the laboratory commented in relation to the difference in results by stating; "..... Repeat appears to confirm original result ....." However, Miller Argent do not share the same conclusions as 'Lab A' as there is approximately a 30% reduction in the laboratory readings from the original results provided, which Miller Argent feel is an unexplained and unacceptable difference for an accredited laboratory. Further discussions were held with 'Lab A' regarding these results and as a result a decision was made by Miller Argent to transfer all future analysis of suspended solids immediately back to the original laboratory 'Lab B' who carried out all suspended solids analysis at Ffos-y-fran prior to February 2015.

As discussed and tabled at the meeting of 25<sup>th</sup> March 2015 detailed internal investigations were also carried out following the incidents, in particular in respect of the actions of all the pumpsmen who were questioned and gave statements and a full account of the events of the 15<sup>th</sup> & 16<sup>th</sup> February 2015. As part of their duties and in line with Miller Argent's procedures, the pumpsmen are required to complete a daily 'Mine Lagoon Inspection Sheet' and the entries on this sheet indicate that the nightshift pumpsmen visited WB lagoon at 19:20 on the 15<sup>th</sup> February 2015 and noted that the water leaving the consented discharge point was clear.

However, further investigations into the GPS tracker fitted to the pump truck indicated the truck was actually down in the void at the sump & pump in Cut 12 at this particular time. According to the GPS records for that night, the pump truck did not visit WB lagoon until 05:39 on 16<sup>th</sup> February 2015. The pumpsmen do have another mode of transport available to them besides the pump truck, in the form of the telehandler, which did not have a GPS tracker fitted at this time and when questioned, the night shift pumpsmen cannot remember which mode of transport they used that night but strongly deny any allegations that they did not inspect or take the sample from WB at the recorded time. It is possible that one of them may have taken the telehandler to WB on this occasion while the pump truck was in the void checking the pump in Cut 12, but I cannot verify this 100% however, this team of pumpsmen in particular have always been very conscientious and diligent in their duties previously.

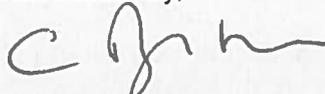
On the 16<sup>th</sup> February 2015 the entries on the 'Mine Lagoon Inspection Sheet' records that the day shift pumpsmen (different team to the 15<sup>th</sup> February 2015) inspected WB lagoon at 09:00, which on further investigation correlated with the GPS data available for the pump truck.

In summary therefore, although there were some issues highlighted with night shift pumpsmen on the 15<sup>th</sup> February 2015, I am satisfied that the samples for both the 15<sup>th</sup> & 16<sup>th</sup> February 2015 and sent to the laboratory were taken from the correct location at WB lagoon, although I am not satisfied with the different results presented by the laboratory 'Lab A' or the lack of correlation of these with the WB probe results. In my opinion therefore, the investigation into these anomalous readings/results has thrown up a number of inconsistencies to cast doubt on the validity of the laboratory results and for that reason Miller Argent have reverted back to the original laboratory 'Lab B' for future analysis of suspended solids.

Finally, on consideration of all the available information discussed with you on 25<sup>th</sup> March 2015, it was felt by Miller Argent that on balance some internal procedures had not been followed by the night shift pumpsmen in line with their training, and disciplinary action was taken. In addition, the telehandler has now been fitted with a GPS system and all six pumpsmen have received further tool box talks to remind them of the correct procedures and reiterate the importance of their roles & responsibilities to Miller Argent and the environment. I have also arranged to have the turbidity probe at WB serviced & re-calibrated by the manufacturers, although the last annual service was carried out only 4 months ago.

I trust this reflects our discussions and summarises the events surrounding the seeming anomalous results which may or may not have resulted in potential breaches of 15<sup>th</sup> and 16<sup>th</sup> February 2015 however, if you require any further information or wish to discuss any of these matters further please do not hesitate to contact me.

Yours sincerely,



Chris Barber  
(Operations Manager)

## Schedule 5 - Notification

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

If any information is considered commercially confidential, it should be separated from non-confidential information, supplied on a separate sheet and accompanied by an application for commercial confidentiality under the provisions of the EP Regulations.

### Part A

Permit Number	EPR / DB 3131 AF.
Name of operator	MILLER ARGENT (SOUTH WALES) LTD
Location of Facility	CWMBARGOED DISPOSAL POINT.
Time and date of the detection	14:00 04/03/15 (RECEIPT OF LAB RESULTS).

**(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution**

To be notified within 24 hours of detection

Date and time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	

**(b) Notification requirements for the breach of a limit**

To be notified within 24 hours of detection unless otherwise specified below

Emission point reference/ source	WB LAGOON.
Parameter(s)	SUSPENDED SOLIDS.
Limit	50 PPM.
Measured value and uncertainty	SEE ATTACHED LETTER
Date and time of monitoring	SEE ATTACHED LETTER.
Measures taken, or intended to be taken, to stop the emission	u u u

Time periods for notification following detection of a breach of a limit	
Parameter	Notification period
SUSPENDED SOLIDS .	24 HRS .
Jeff Edwards (Senior Environment Officer)	
informed by telephone & email on 5th March 2015 .	

(c) Notification requirements for the detection of any significant adverse environmental effect	
To be notified within 24 hours of detection	
Description of where the effect on the environment was detected	
Substances(s) detected	
Concentrations of substances detected	
Date of monitoring/sampling	

Part B - to be submitted as soon as practicable

Any more accurate information on the matters for notification under Part A.	See attached letter
Measures taken, or intended to be taken, to prevent a recurrence of the incident	"
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission	"
The dates of any unauthorised emissions from the facility in the preceding 24 months.	18/12/13 , 19/12/13 , 06/01/14 .

Name*	CHRIS BARBER .
Post	OPERATIONS MANAGER .
Signature	C Barber
Date	20 April 2015 .

\* authorised to sign on behalf of the operator