

CORRIB GAS DEVELOPMENT

Project Monitoring Committee

**Minutes of the Project Monitoring Committee Meeting held on 26th September, 2007
at 11.00 am in the Civic Centre, Belmullet, Co. Mayo**

Chairman: Mr. D. Mahon, County Manager

Present: Ms. Agnes McLaverty, Shell E & P. Ireland Limited
Mr. Gerry Costello, Shell E & P Ireland Limited
Mr. Tony Doyle, Shell E & P Ireland Limited
Mr. Nicholas Whyte, Community Representative
Mr. Chris Tallott, Community Representative
Garda Peter Murray, An Garda Síochana
Mr. Enda McDonagh, Bord na Móna
Mr. Paddy Mahon, Mayo County Council Project Manager
Mr. Peter Hynes, Mayo County Council
Mr. Vincent Roche, North Western Regional Fisheries Board
Mr. Gerard McDonnell, Community Representative
Mr. Brendan Butler, Shell E & P. Ireland Limited
Mr. Dick McKeever, Dept. CMNR
Mr. Ciáran Ó hÓbain, Dept. CENR

Apologies: Mr. Ray Smith, Environmental Protection Agency
Mr. Denis Strong, National Parks & Wildlife Service
Mr. John Coll, Director of Services, Mayo County Council

In Attendance: Ms. Jackie Denning, Mayo County Council

1. Minutes

The Minutes of the Project Monitoring Committee Meeting held on 18th July 2007 and already circulated, were approved having been proposed by Mr. Costello and seconded by Mr. P. Hynes.

2. Matters arising

There were no matters arising.

3. Water Quality – Carrowmore Lake

Mr. P. Mahon updated the meeting on the position regarding the water quality of Carrowmore Lake as set out in report and summary of analysis circulated to the meeting – copy of which is available on the Mayo County Council’s website – www.mayococo.ie There were no further items raised relating to the water quality of Carrowmore Lake.

4. Updates:

- **Roadworks/Transportation**

Mr. P. Mahon informed the meeting that there was nothing major to report, all roadworks are complete.

- **Bord na Móna**

Mr. McDonagh indicated that monitoring of the Shrahmore Peat Repository is ongoing and he updated the meeting as set out in report circulated also available on www.mayococo.ie . He also circulated handout on the ‘Peat Deposition Project’, also available on www.mayococo.ie

Item No. 9: Mr. Mc Donnell raised a local issue regarding the ‘Shrahmore Peat Repository Site’ on behalf of the Cloontakilla residents who feel the roadway into the site should be either kept as a walkway or used as a Driver Learner Area for local students. Mr. Mc Donagh advised that the decision on the roadway structure lies with the EPA who will decide on whether it can remain. The roadway must stay in place for a minimum of 3 years before it can removed in any case.

5. Update on Terminal

Mr. Butler outlined the position on works undertaken and also the outlook for September 2007 onwards at the Bellanaboy Bridge Site, as set out in report dated 26th September circulated to the meeting - copy of which is available on www.mayococo.ie Mr. Doyle outlined the position on environmental issues at the Bellanaboy Bridge Site as set out in the report dated 26th September 2007 circulated and also available on www.mayococo.ie

Item No. 9: Mr. Mc Donnell raised issue on behalf of the community regarding security at the terminal as recent incidents of people climbing gates and entering the terminal posed a threat to workers. Mr. Butler advised the meeting that there is an increased security level and Shell are working to improve the situation.

6. Environmental Issues

Mr. P. Mahon outlined the position on environmental issues at the Bellanaboy Site as set out in report available on www.mayococo.ie

7. Community Fund

Mr. P Mahon informed the meeting of the current position regarding the Peat Haulage Community Fund as set on in report available on www.mayococo.ie.

8. Court Cases

Mr. Costello indicated that the judgment of Judge Laffoy on 18th April, 2007 dealt with Shell's application to discontinue its claims in the legal proceedings. The judgement made no findings as to the validity or otherwise of the current s.40 Gas Act pipeline consent or the CAOs. These are issues that remain to be determined in the case.

9. Local Issues

- Undergrounding of Eircom cables
Mr. Costello confirmed that there was a meeting today relating to this, update for next meeting of the PMC.
- Replies from queries from the public
Mr. Mc Donnell raised the following issues:
 - ❖ Complimented Shell on the employment of over fifty people from the Kilcommon area & urged Shell to continue employment of local people on site.
 - ❖ He is not taking phonecalls relating to the project from certain members of the Shell to Sea campaign but would follow up e mail/correspondence queries.
 - ❖ Carrowmore Water to Glenamoy – The Chairman confirmed that this features in the latest Water Services Investment Programme.
 - ❖ An Taisce's role in the project not being seen by some members of the Community as working independently – Mr. Costello confirmed that RPS are to meet with An Taisce soon.
 - ❖ Corrib Gas Update – June Edition – Community requested further information relating to article – Ms. Mc Lavery will contact Mr. Mc Donnell directly.
 - ❖ Newsletter from the Community Representatives informing the community on their role on the PMC and EMG will be going out soon through County Development Board.

10. Any other business

Mr. Tallot congratulated all involved in the peat removal and urged Shell to employ local people where possible on site

Mr. Mc Donnell suggested a nominee from Kilcommon should be considered for the Investment Fund Advisory Board Committee. Mr. Costello advised that this would be considered.

Mr. Hynes concluded that in relation to Carrowmore Lake a clear message must be delivered to Communities that there is no cause for concern with drinking water, as evidence from monitoring verifies.

Ms. Mc Lavery circulated copies of Corrib Onshore Gas Pipeline, Community Update September 2007 which were posted to all households in the region last week.

It was agreed to hold the next meeting of the PMC on the Terminal Site on Wednesday 14th November, 2007 at 11am.

Mr. Costello will arrange for a site visit on the day.

This concluded the business of the meeting.

Corrib Gas Development

Report for PMC Meeting Dated 14th November 2007

Prepared by: P. Mahon Senior Engineer, Project Manager for Mayo County Council

Water Quality – Carrowmore Lake

- Mayo County Council's Project Team has continued to monitor the surface waters in and around the Bellanaboy site. Summaries of the most recent verified results are attached.
- The results show that in the last monitoring period the discharge of surface water from the Terminal Site has had no significant impact on the water quality of the Bellanaboy River and Carrowmore Lake.
- The results also show that the discharge of surface water from the Terminal Site has had no adverse impact on the quality of drinking water produced at the Erris Regional Water Supply Scheme at Barnatra.

Environmental Issues at the Bellanaboy Site

- Construction work at the terminal site is ongoing. The main activities are mechanical and electrical work, drainage work, reinforced concrete works and foundation works for the administration block.
- Surface water runoff from the terminal footprint, the carrier drain road and other roads outside the terminal footprint, is generally treated by the axonics unit prior to discharge to the site drainage system.

Community Fund

The evaluating committee for the Community Fund relating to Condition No. 42 of An Bord Pleanála's schedule of conditions has approved the following;

	Community Group	Scheme	Amount
1	Attavally Community Group	Village Enhancement	€60,000
2	Bangor Angling Club	Marina/Berthing Facility	€185,000
3	Glencullin Community Group	River Protection Project	€60,000
4	Bellanaboy/Leenamore Residents Group	Village Enhancement / Playing Facilities	€145,000
		Total	€450,000

It is anticipated that these projects will attract matching funds from the various funding programmes that are available.

Schemes 1 and 4 are expected to commence in the coming weeks. Scheme 3 will be carried out in the early summer of 2008. Scheme 2 is dependent on receiving additional funds from other sources in order for the project to be viable. If these funds are not in place by June 2008 the scheme will be reviewed by the evaluating committee.

Erris Regional Water Supply Scheme – Extension to Glenamoy

- This scheme is included in the 2007-2008 water services investment programme.
- Mayo County Council will shortly make a submission to the Rural Water section of the Department of Environment Heritage and Local Government outlining the details and cost associated with the scheme for their approval.
- Once approval for the scheme is in place the implementation project will be managed by the rural water section of Mayo County Council.
- It is hoped that these works will be carried out in 2008.

CARROWMORE LAKE

Results from 07/09/2007 to 25/10/2007 (14 Samples taken)

Analysis by Bord na Mona Laboratory Newbridge, Co. Kildare

Parameter	Units	Average	Max	Min
Suspended Solids	mg/l	8	24	<5
Turbidity	N.T.U	5.8	12	3
pH	pH units	7.6	8	7.4
Conductivity	uS/cm	160	174	138
Phosphate	mg/l P	<0.01	<0.01	<0.01
Total Phosphorous	mg/l P	0.06	0.1	<0.05
Ammonia	mg/l NH ₃ -N	0.02	0.03	<0.02
Nitrate	mg/l NO ₃ -N	<0.2	<0.2	<0.2
Nitrite	mg/l NO ₂ -N	<0.02	<0.02	<0.02
Total Aluminium	ug/l Al	82	245	22

ERRIS REGIONAL WATERWORKS (Final Treated Water)

Results from 24/09/2007 to 05/11/2007 (43 Samples)

Analysis carried out at Erris Regional Waterworks

Parameter	Units	Average	Max	Min	Drinking Water Limits
Colour	mg/l	2.5	11	0	<10 Haz
Turbidity	N.T.U	0.2	0.5	0	<2.0 NTU
pH	pH units	7.2	7.9	6.3	6.5 – 8.5
Free Chlo/Res	mg/l	0.76	1.5	0.14	>0.3
Total Chlo/Res	mg/l	1	1.97	0.29	>0.3
Flourine	ppm	0.62	0.72	0.42	0.6-0.8
Total Aluminium	ug/l	13	32	10	200

BELLANABOY RIVER

(Upstream and Downstream of discharge from Terminal site)

Results from 07/09/2007 to 25/10/2007 (14 Samples taken)

Analysis by Bord na Mona Laboratory Newbridge, Co. Kildare

Parameter	Units	BEL 1 (upstream)			BEL 2 (downstream)		
		Average	Max	Min	Average	Max	Min
Temp.	°C	11.8	15	8.4	11.8	15	9.4
Dissolved Oxygen	% Sat.	92	96	85	92	97	85
Suspended Solids	mg/l	9	32	<5	10	55	<5
Turbidity	N.T.U	3.8	15	2	5	20	2
pH	pH units	7	7.4	6.5	7	7.4	6.5
Conductivity	uS/cm	224	433	130	191	278	126
Total Dissolved Solids	mg/l	130	190	<50	122	200	<50
Phosphate	mg/l P	0.05	0.3	<0.01	0.03	0.08	<0.01
Total Phosphorus	mg/l P	0.1	0.4	<0.05	0.1	0.47	<0.05
Ammonia	mg/l NH ₃ -N	0.04	0.09	<0.02	0.04	0.1	<0.02
Nitrate	mg/l NO ₃ -N	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Nitrite	mg/l NO ₂ -N	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Total Aluminium	ug/l Al	122	523	37	158	660	29

SP1 (Discharge point from terminal site)

Results from to 07/09/2007 to 25/10/2007 (14 Samples)

Analysis by Bord na Mona Laboratory Newbridge, Co. Kildare

SP 1				
Parameter	Units	Average	Max	Min
Suspended Solids	mg/l	11	40	<5
Turbidity	N.T.U	14	57	3
pH	pH units	7.5	7.8	7
Conductivity	uS/cm	309	367	156
Total Dissolved Solids	mg/l	197	245	114
Phosphate	mg/l P	0.01	0.03	<0.01
Total Phosphorus	mg/l P	0.06	0.13	<0.05
Ammonia	mg/l NH ₃ -N	0.04	0.31	<0.02
Nitrate	mg/l NO ₃ -N	0.29	0.51	<0.2
Nitrite	mg/l NO ₂ -N	<0.02	<0.02	<0.02
Total Aluminium	ug/l Al	635	2589	54

Axonics Water Treatment Units (Post-treatment Results)

Results from 07/09/2007 to 25/10/2007 (14 samples)

Analysis by Bord na Mona Laboratory Newbridge, Co. Kildare

Post-Treatment (14 Samples)

Parameter	Units	Average	Max	Min
<u>Suspended Solids</u>	mg/l	5	6	<5
Turbidity	N.T.U	1.5	3	<1
pH	pH units	6.4	6.6	6
Conductivity	uS/cm	385	452	335
Total Dissolved Solids	mg/l	228	340	156
Phosphate	mg/l P	0.01	0.05	<0.01
Total Phosphorus	mg/l P	0.06	0.15	<0.05
Ammonia	mg/l NH ₃ -N	0.2	0.39	<0.07
Nitrate	mg/l NO ₃ -N	0.7	1.13	<0.2
Nitrite	mg/l NO ₂ -N	<0.02	<0.02	<0.02
Total Aluminium	ug/l Al	250	584	63

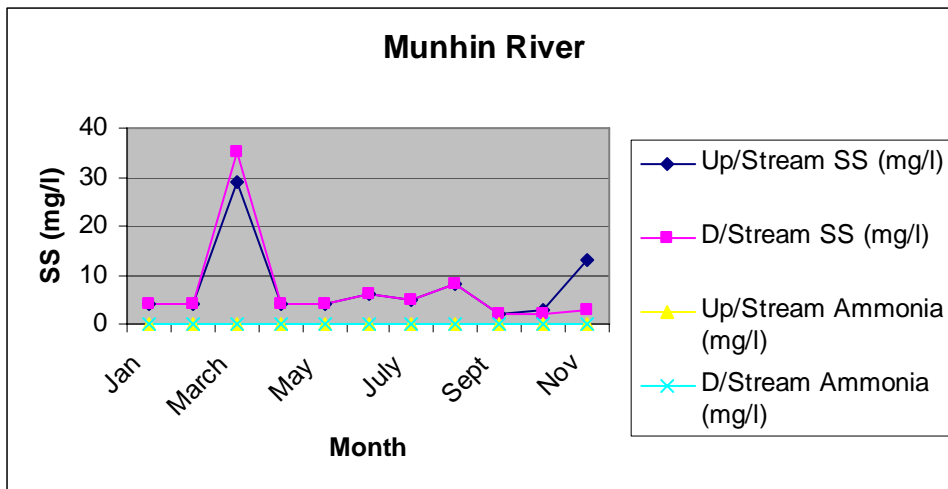
Srahmore Peat Repository
WL 0199-01

Environmental Management System Up-Date No. 27(12/11/07)

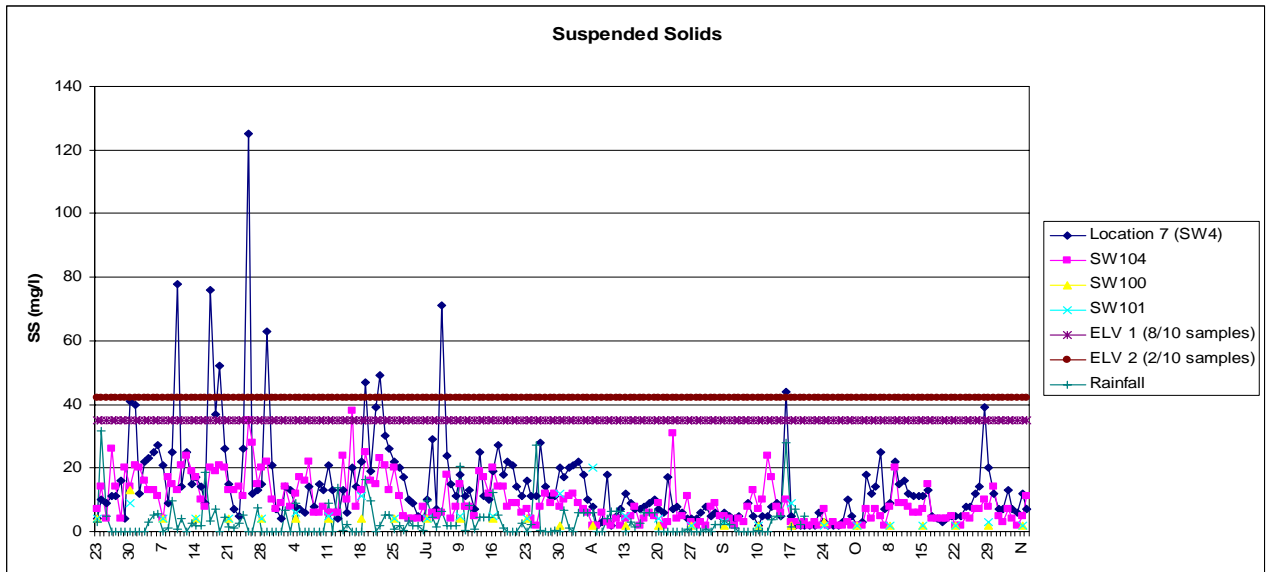
Decommissioning and Rehabilitation

Environmental Monitoring:

- There were no non-compliances since the last PMC Meeting on the 26th September.
- There were no complaints received at the site since the last meeting.
- There were no incidents recorded at the site since the last meeting.



Results: Munhin River



Results: SW4/100&101

The average SS mg/l for SW4 over the past 4 months has been 10mg/l. There has been a marked decrease in SS levels at the site since peat deposition was completed and revegetation started to occur on the bays deposited in 2007.

Srahmore Site Update:

Personnel:

On Site

		Tractor & General Oper.	0	Environmental	0
BnM (Engineering)	1	Fitters	0	Archaeological	0
Site Admin & Mgt.	1	Electricians	0		
		Site Supervisors	0		
		Excavator & Shovel	0		
TOTAL EMPLOYED					2

Contractors

Security	0	Catering	0		
TOTAL EMPLOYED					0

Off Site

Head Offices Staff	2			BnM (Support)	1
Environmental Officer	1				
TOTAL EMPLOYED					4

OVERALL TOTAL EMPLOYED					6
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On-going work:

The on-going work at the site for the last two months has been:

- On-going drainage work.
- Levelling and compaction of the peat bays.

All of this work has now been completed and the only on-going operations on site will be:

- Environmental monitoring and compliance.
- Stability assessment of the deposited peat.

End

Bellanaboy Bridge Site

Report to The Project Monitoring Committee

14th November 2007

Works Undertaken

The following construction operations are ongoing;

- Operation of Axonics plant
- Continuation of environmental and geotechnical monitoring
- Completion of earthworks / earth embankment
- Construction of wastewater tank and wastewater treatment building
- Continuation of piling within terminal footprint area
- Fit out of temporary site offices
- Civils and foundations works
- Erection of structural steel
- Scaffolding erection
- Piping installation
- Building works

Outlook From November 2007 Onwards

- Continuation of environmental monitoring and Axonics operation.
- Continuation of structural steel erection
- Mobilisation of additional mechanical, electrical and building works contractors to site
- Commencement of electrical works
- Completion of piling works
- Continue scaffolding erection
- Continue of piping installation
- Commencement of tankage installation
- Continue of building works

ENVIRONMENTAL REPORT

Dust – No dust results were available for the sampling period due to sample interference which prevented analysis.

Fuel – Approximately 403.7 m³ of fuel was delivered to site in September and October.

Noise – All noise levels recorded were below the L_{Aeq} 65 dB(A) threshold.

Vibration monitoring – All vibration monitoring results were within guidance values.

Traffic – There were approximately 4,200 HGV movements during September and October.

Waste – Seven skips of refuse (canteen waste, etc.), 1 skip of cardboard/plastics, 3 skips of metal and 5 skips of timber waste were removed off site during September and October. There were 3 shipments of hazardous waste (oily materials). The effluent holding tanks were emptied of approximately 322.1 m³ during September and October. Approximately 9.7 m³ were removed from the on site portalooos in the same period.

Water Quality – All monitoring and sampling locations were accessible for download, recalibration and reinstallation during the months of September and October.

A summary of the main surfacewater parameters measured for grab sampling during September and October 2007 (available range of lowest to highest) at SP1 is presented below;

pH (pH Units)

6.3 to 7.5

Suspended Solids (mg/l)

<2 to 8

Orthophosphate (ug/l P)

16 to 38

Nitrate (mg/l NO₃)

0.57 to 1.84

Conductivity (uS/cm)

165 to 356

Turbidity (NTU)

2 to 80

Groundwater samples were taken and borehole monitoring equipment was downloaded for the months of September and October. A summary of the main groundwater parameters measured (range of lowest to highest) follows:

pH

5.3 to 6.0

Conductivity (uS/cm)

178 to 450

Nitrate (mg/l NO3)

Not Detectable to 3.14

Total Dissolved Solids (mg/l)

98 - 300

Complaints – There were no construction activity related complaints logged with either SEPIL or RBL during the months of September and October.

Incidents – There were no environmental incidents during the months of September and October.

Exceedances – There were three exceedances at SP1 during September and October relating to Total Aluminium on the 24th September (closed), 8th October (closed) and 15th October (open). In all cases the values were in the range of 200 ug/l to 300 ug/l and in most cases values returned to within the limit. The cause of the exceedances has been investigated and drainage improvement measures are in progress to reduce the risk of recurrences.

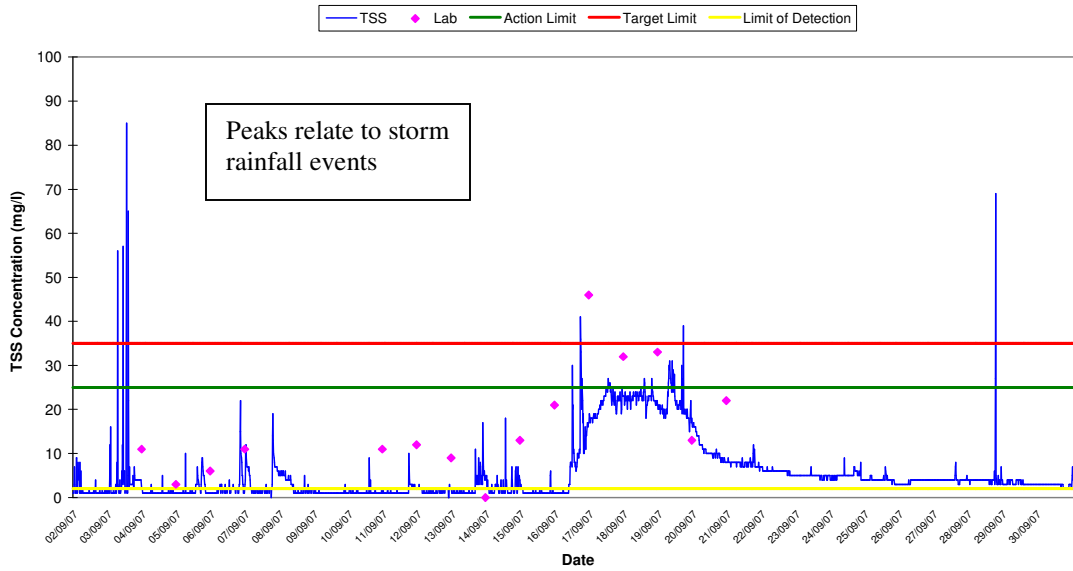
Necessary Environmental Works

- Continuous drainage maintenance.
- Continuous operation of on-site surface water treatment plant.
- Removal of all waste and effluent from site on an as needs basis.
- Inspect, repair (when required) and recalibrate all in situ monitoring equipment.
- Monitor/sample and download water (surface and ground) quality monitoring devices.

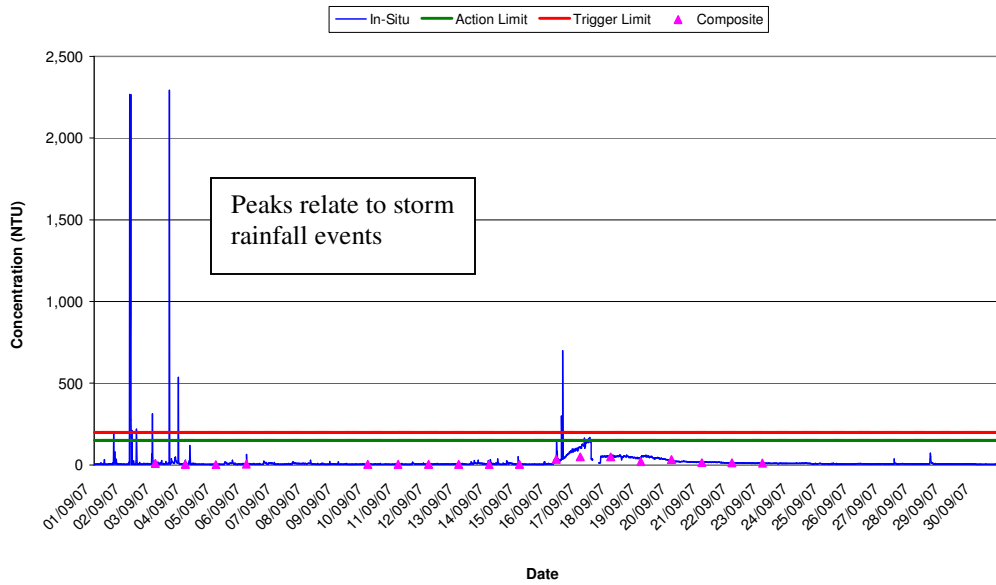
Environmental Improvements

- New behavioral based HSE continuous improvement system established on site.
- On going site drainage improvements in progress.

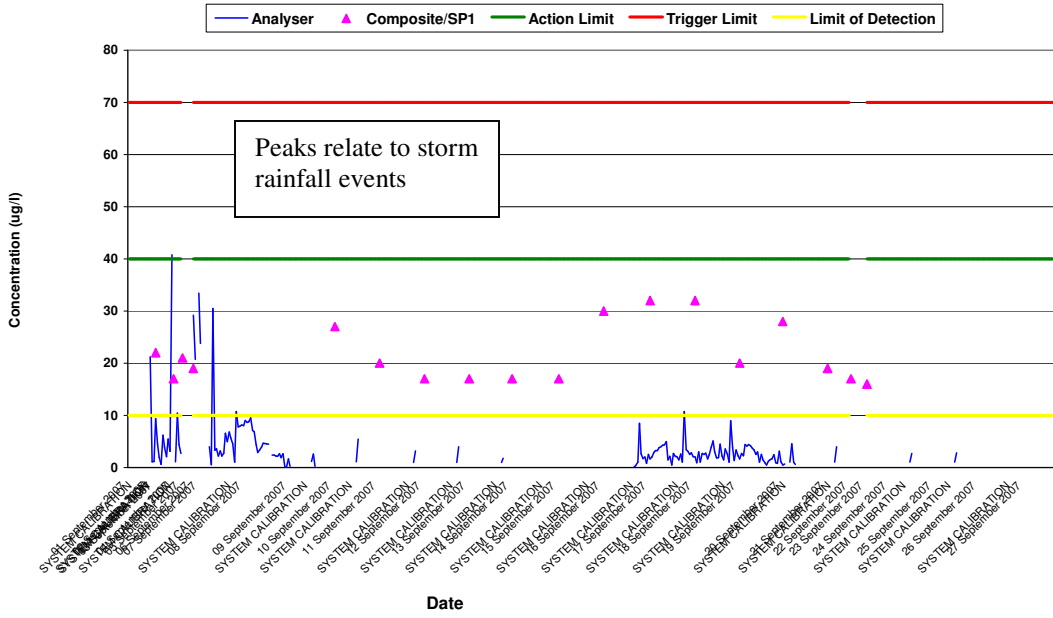
**Total Suspended Solids Results at SP1
September 2007**



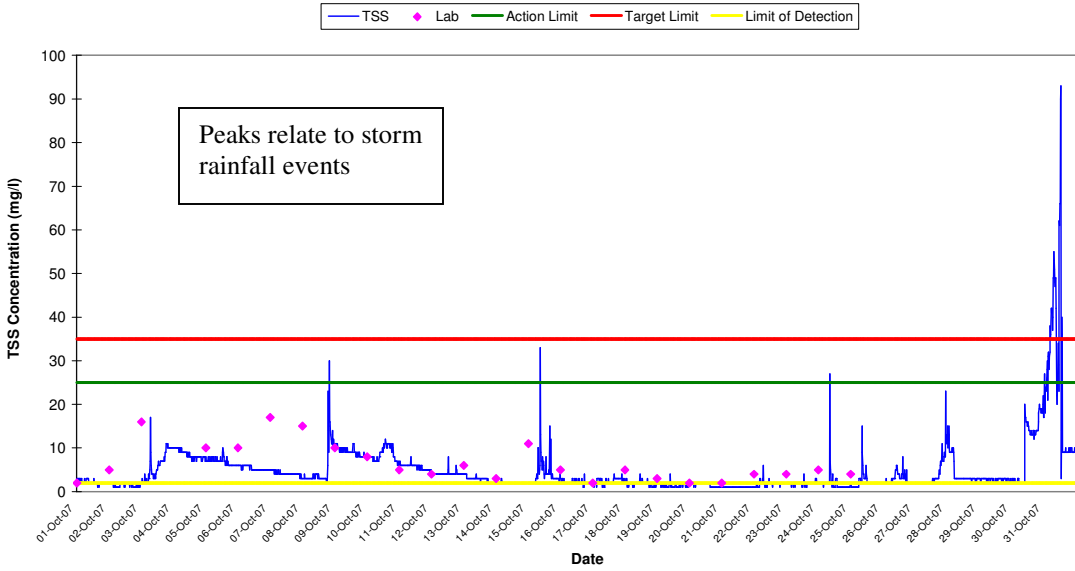
**Turbidity Results at SP1
September 2007**



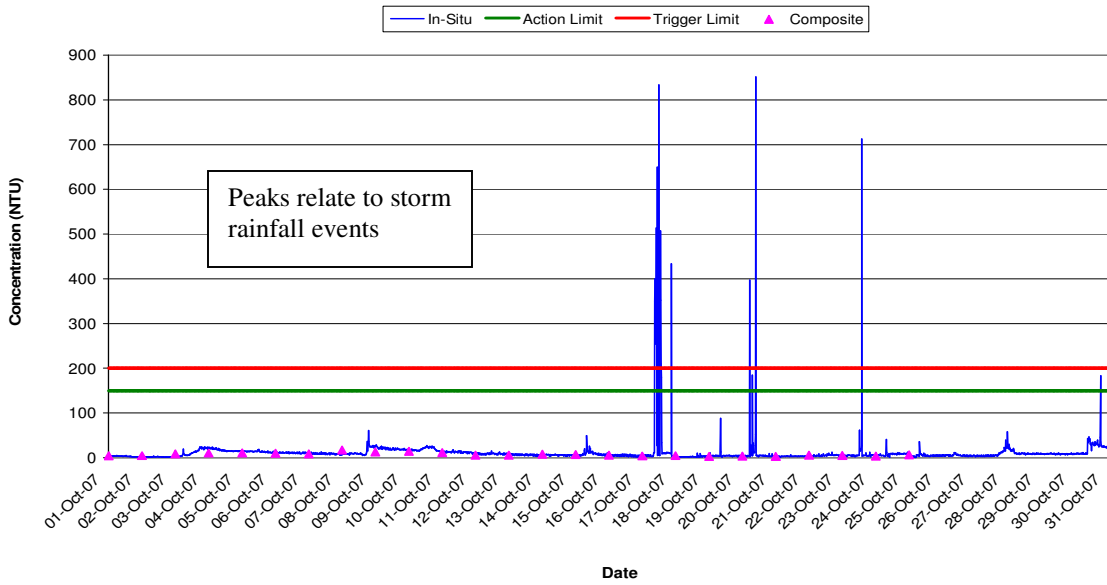
**Orthophosphate Results at SP1
September 2007**



**Total Suspended Solids Results at SP1
October 2007**



Turbidity Results at SP1 October 2007



Orthophosphate Results at SP1 October 2007

