

# Bellanaboy Bridge Site

## Report to the Project Monitoring Committee

05<sup>th</sup> April 2006

### Works undertaken

- No construction activities were carried out during the month of March.
- Environmental monitoring works continue.
- Geotechnical monitoring works suspended since 20<sup>th</sup> March.
- Surface water treatment equipment is treating silt laden water from the excavated area to the required level. Full automation of the installed water treatment plant is complete.
- The automated weir structures (to measure flow at the surface water monitoring locations upstream and downstream of the settlement ponds) continue to operate.

### Outlook from April 2006 onwards

- Construct foundations and erect shed for Axonics water treatment plant extension.
- Continue with ongoing environmental care, monitoring & maintenance works.
- Operate surface water treatment equipment to deal with surface water residing on the terminal footprint and to mitigate against run off erosion of fine silt into watercourses.
- Attempt to recommence Geotechnical monitoring.
- Explore additional water treatment processes.

### ENVIRONMENTAL REPORT

**Dust** – The results for the monitoring period 12<sup>th</sup> Dec 2005 to 20<sup>th</sup> Jan 2006 at the four monitoring locations (D1 to D4) were 135, 104, 133 and 108 mg per m<sup>2</sup> per day averaged over a 30 day

period. The results for the monitoring period 20<sup>th</sup> Jan 2006 to 24<sup>th</sup> Feb 2006 at the four monitoring locations (D1 to D4) were 31, 51, 24 and 58 mg per m<sup>2</sup> per day averaged over a 30 day period. The Consent Limit is 350 mg per m<sup>2</sup> per day averaged over a 30 day period. The results for the monitoring period 24<sup>th</sup> Feb 2006 to 20<sup>th</sup> Mar 2006 will be presented in next month's report.

**Fuel** – Approximately 27,126 litres (7,165 gallons) were delivered to site in February and 18,920 litres (5,000 gallons) were delivered in March.

**Noise** – No noise monitoring was undertaken (no construction work undertaken).

**Traffic** – There were no HCV (heavy construction traffic) traffic movements on or off site during the months of February and March

**Waste** – No waste was removed off site (residual, recyclable or hazardous) during the months of February or March. Two skips were due to be removed last month but due to protestor activity this was not possible. No recyclable or hazardous waste was removed. The effluent holding tanks were emptied during both months and approximately 18m<sup>3</sup> (18,000 litres or 3,959.5 gallons) was removed during Feb and 17.5m<sup>3</sup> (17,500 litres or 3,849 gallons) was removed during March. Approximately 0.6m<sup>3</sup> (600 litres or 132 gallons) were removed from the on site portaloos in the last two months.

**Water quality** – All monitoring and sampling locations were accessible for download, recalibration and reinstallation during the months of February and March. The Phosphate equipment issue (power supply and calibration issues) continues to be a problem and the analyser is currently

still out of commission. As a result of being unable to get the necessary equipment on to the site to rectify this issue this problem will continue. The dissolved oxygen sondes were replaced during the month of February. The conductivity probe at SP1 began to cause problems and a new probe has been ordered. The TSS meter is now fully operational.

The weir structures are now installed and operating. Data can be accessed both manually and via telemetry.

As a result of the equipment problems at SP1 grab samples are taken daily. A summary of the main surface water parameters measured for the grab sampling events in February and March at SP1 (range of lowest to highest) are presented below:

pH

5.8 – 7.2 (Feb)

6.5 – 7.2 (March)

Suspended solids (mg/l)

<4 – 17 (Feb)

<4 – 22 (March)

Phosphate (µg/l P)

12 – 49 (Feb)

13 – 39 (March)

Conductivity (uS/cm)

118 – 220 (Feb)

119 – 199 (March)

Dissolved Oxygen (% Sat O<sub>2</sub>)

90.7 – 101 (Feb)

92.5 – 96.6 (March)

Turbidity (mg/l)

2 – 40 (Feb)

3 – 9 (March)

Nitrate (mg/l NO<sub>3</sub>)

<0.44 - 0.000 (Feb)

<0.44 - 0.000 (March)

Monthly graphs for TSS, Orthophosphate (only grab samples results are provided due to equipment malfunction) and Turbidity are attached for the months of February and March. Action and Trigger Levels presented on the graphs are described in Section 7.0 of the Environmental Monitoring Plan.

Groundwater samples were taken and down hole monitoring equipment was downloaded for the month of February. The data from March is still outstanding and will be available in next month's report. A summary of the main groundwater parameters measured (range of lowest to highest):

pH

5.8 – 6.3

Temperature (°C)

Not Recorded

Conductivity (uS/cm)

236 - 657

Nitrate (mg/l NO<sub>3</sub>)

<0.44 – 3.331

Phosphate (µg/l P)

<30 – 1,311 (Feb)

Total Dissolved Solids

29 – 446

**Vibration monitoring** – No vibration monitoring took place during the months of February or March.

**Complaints** – There were no construction activity related complaints logged with either SEPIL or RBL during the months of February or

March. Protest action at the main gates remained.

**Incidents** – There were two environmental notifications to Mayo Co. Co. and one recorded environmental exceedance during the reporting period. These were:

**Notification No. 1:** On Wednesday 01 February 2006 Mr. Paddy Mahon from Mayo Co. Co. while on a site visit noticed that the water being retained in the south-west corner of the terminal excavation was overflowing the retaining peat structure and into one of the surface water drains. Further investigation of the area showed that the peat plug that was retaining the water had been tampered with in such a way that its removal allowed water to flow out and on to the settlement ponds. The loose peat that had been removed was replaced and consolidated it so that the peat once again acted as a barrier to the flowing water.

A new wooden retention barrier was placed across the outflow sluice.

Security commenced visually inspections of certain drains on site twice nightly to ensure nothing is being interfered with.

An Garda Siochana were notified in writing.

**Status – Investigated, Actioned and Closed.**

**Notification No. 2:** A problem was identified with the conductivity probe at SP1 on the 10th March. The conductivity probe on the SP1 sonde was replaced on the 11-03-06. By early on the 12-03-06 the value had returned to the high value seen previously. A replacement sonde was installed on the 30-03-06.

**Status – Investigated, Actioned and Closed.**

**Incident No. 1:** On March 26th the TSS analyser recorded high results. There were no site works at the time to account for the high value, however rainfall was quite high that day (19mm). The turbidity data for this date was very low so it is thought that the high values recorded were caused by

material clogging the probe head rather than a contamination event. The lab sample results for this date will be reviewed when they come available.

**Status – Open.**

### **February 15th Report Incidents Follow-Up**

All incidents bar one from January were closed. This is:

**Incident No. 1:** Equipment Failure – The PO<sub>4</sub> analyser started to produce negative results. The results were forwarded to the manufacturer for review.

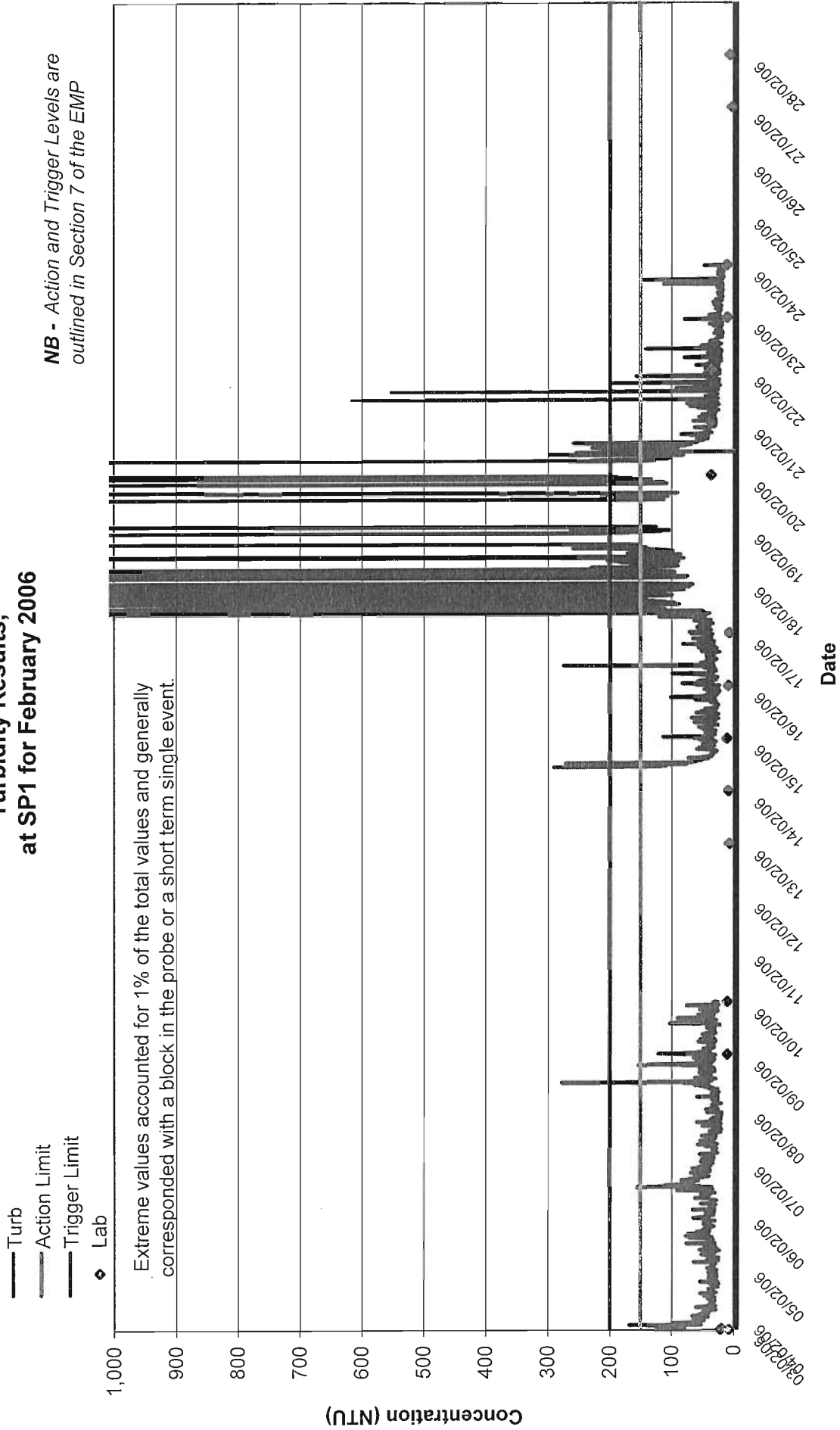
**Status – Open. It is currently not possible to get the required power supply onto site due to protestor actions.**

### **Necessary Environmental Works**

- Continuous drainage maintenance
- Continuous operation of on-site surface water treatment plant.
- Remove 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.

## Turbidity Results, at SP1 for February 2006

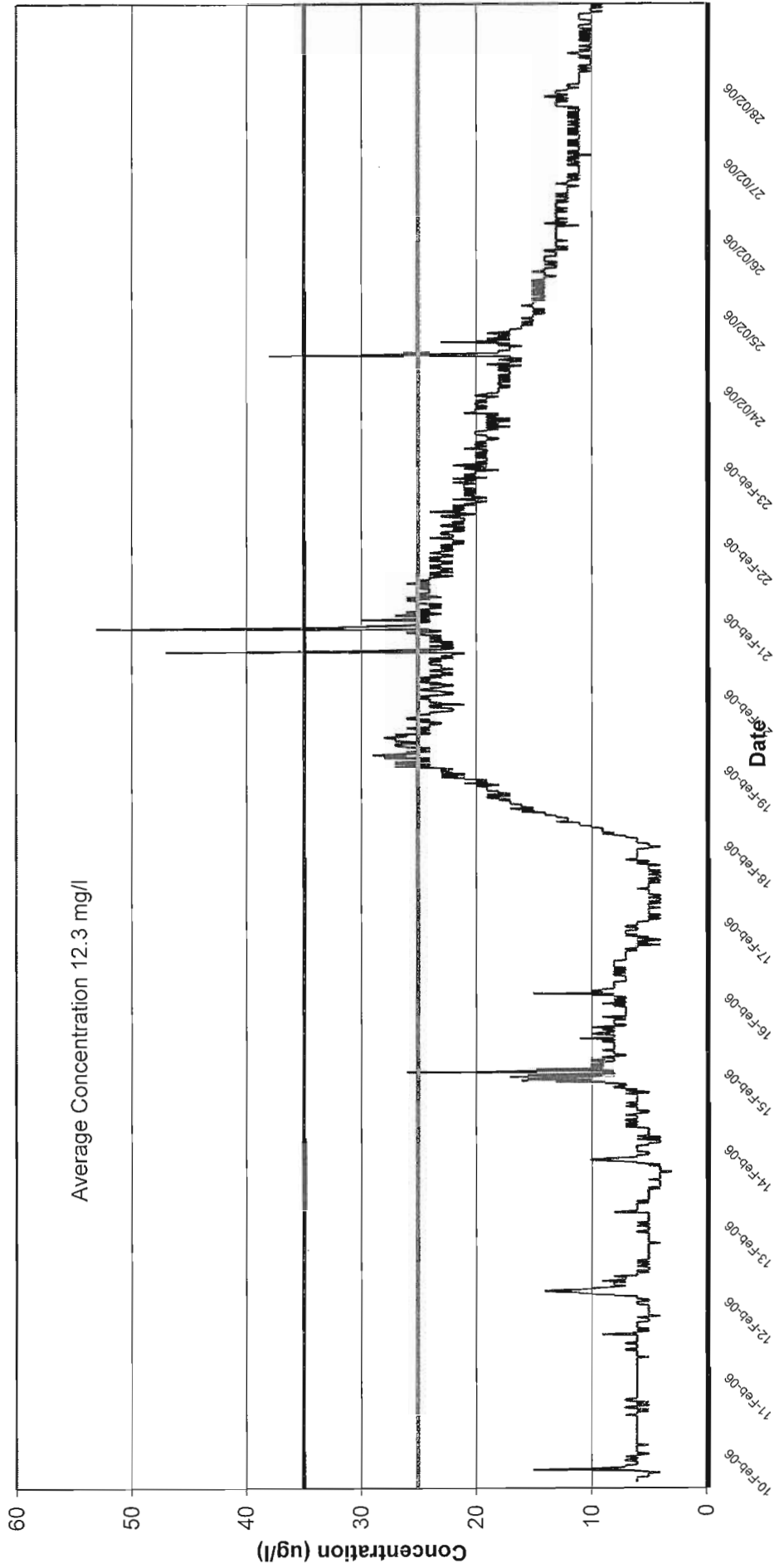
**NB - Action and Trigger Levels are outlined in Section 7 of the EMP**



# Total Suspended Solids Results, at SP1 for February 2006

- TSS
- Action Limit
- Target Limit

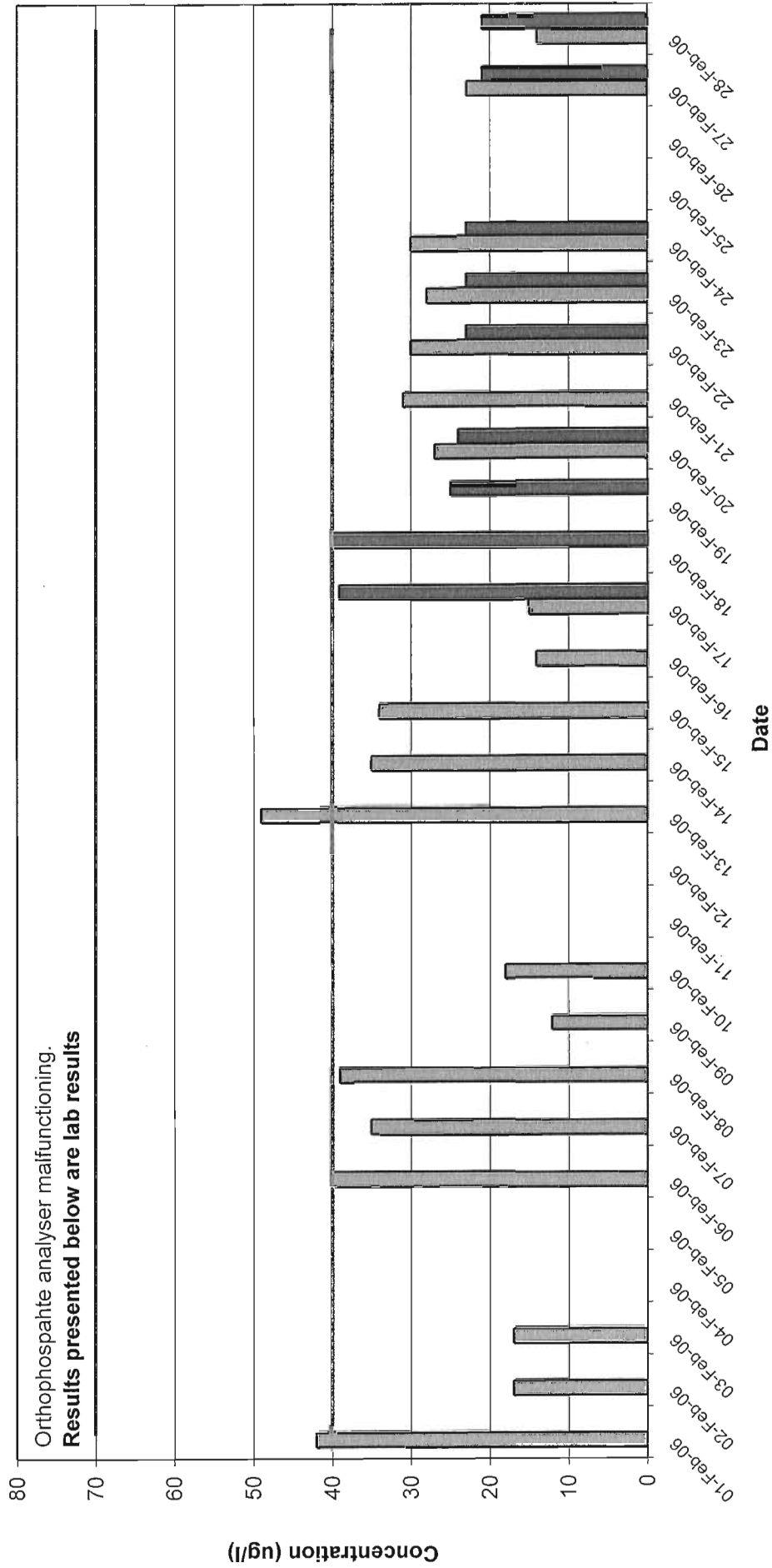
**NB - Action and Trigger Levels are outlined in Section 7 of the EMP**



## Orthophosphate Results, at SP1 and the composite sampler February 2006

**NB - Action and Trigger Levels are outlined in Section 7 of the EMP**

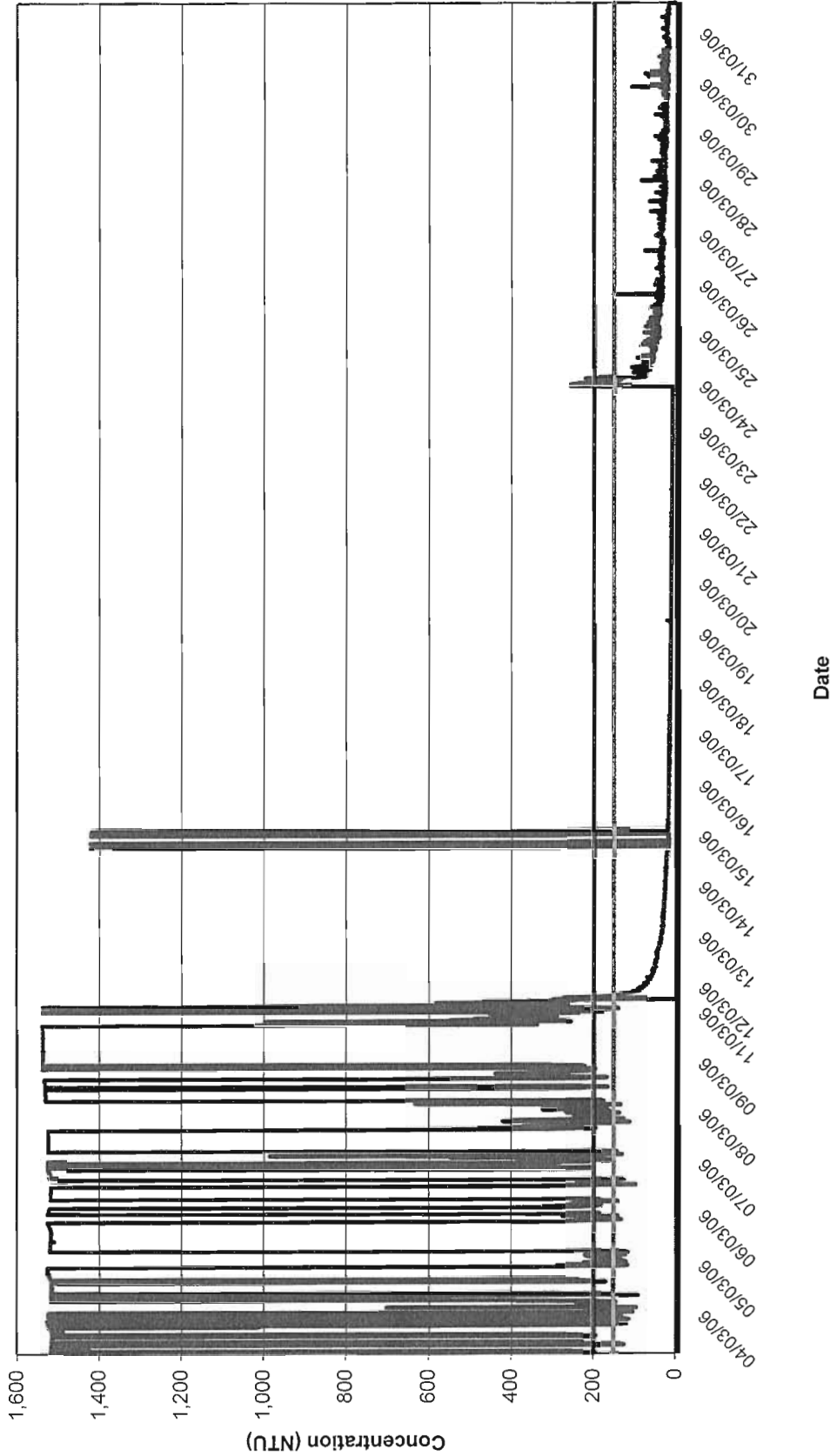
- SP1
- Composite
- Action Limit
- Trigger Limit



# Turbidity Results, at SP1 for March 2006

- Turb
- Action Limit
- Trigger Limit
- ◆ Lab

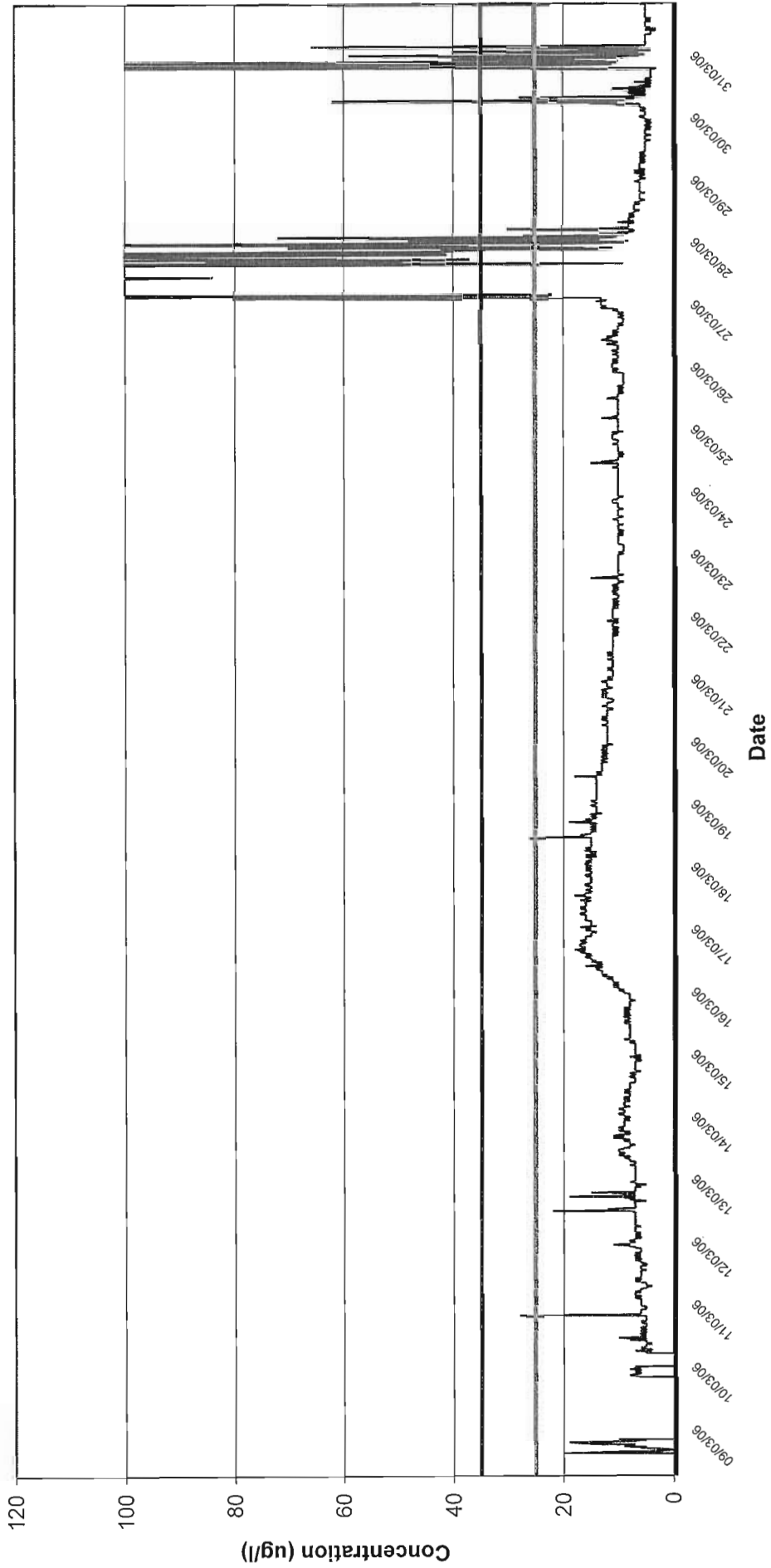
**NB - Action and Trigger Levels are outlined in Section 7 of the EMP**



### Total Suspended Solids Results, at SP1 for March 2006

- TSS
- Action Limit
- Target Limit

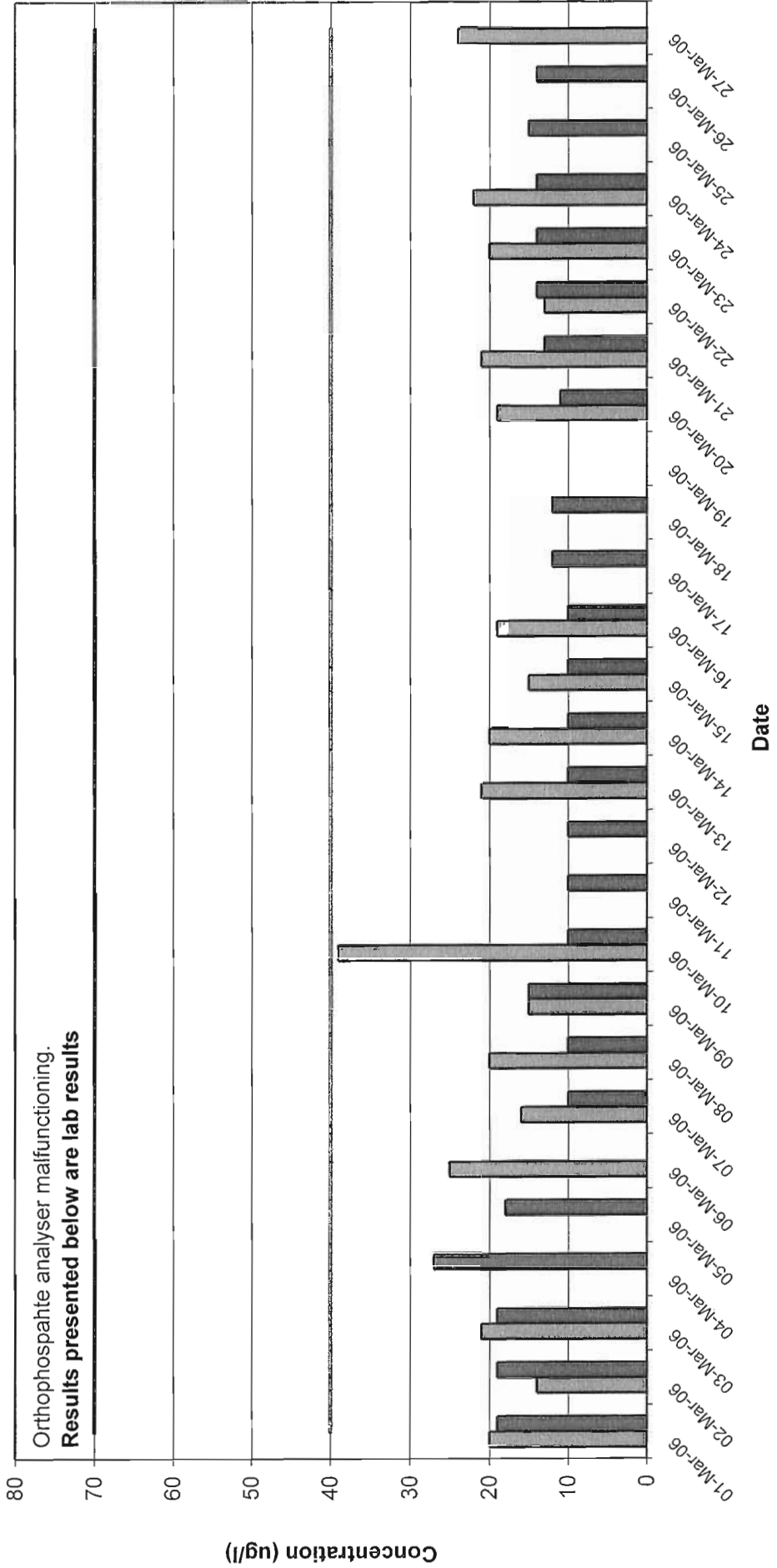
**NB - Action and Trigger Levels are outlined in Section 7 of the EMP**



## Orthophosphate Results, at SP1 and the composite sampler March 2006

**NB - Action and Trigger Levels are  
outlined in Section 7 of the EMP**

- SP1
- Composite
- Action Limit
- Trigger Limit



Srahmore Peat Repository  
WL 199-1

**Environmental Management System Up-Date No. 12 (05/04/06)**

Environmental Monitoring:

- The Srahmore site was fully compliant regarding emissions, since the last meeting (15/02/06)
- There were no complaints received at the site since the last meeting.
- There were no incidents recorded at the site since the last meeting.

Environmental Work:

Environmental work at the site is on-going. This includes daily, weekly and monthly visual inspections at all emissions points.

Annual Environmental Report:

This report has been submitted to the EPA on the 28/03/06 and is available for inspection at the site office or at EPA Headquarters in Wexford.

END.