



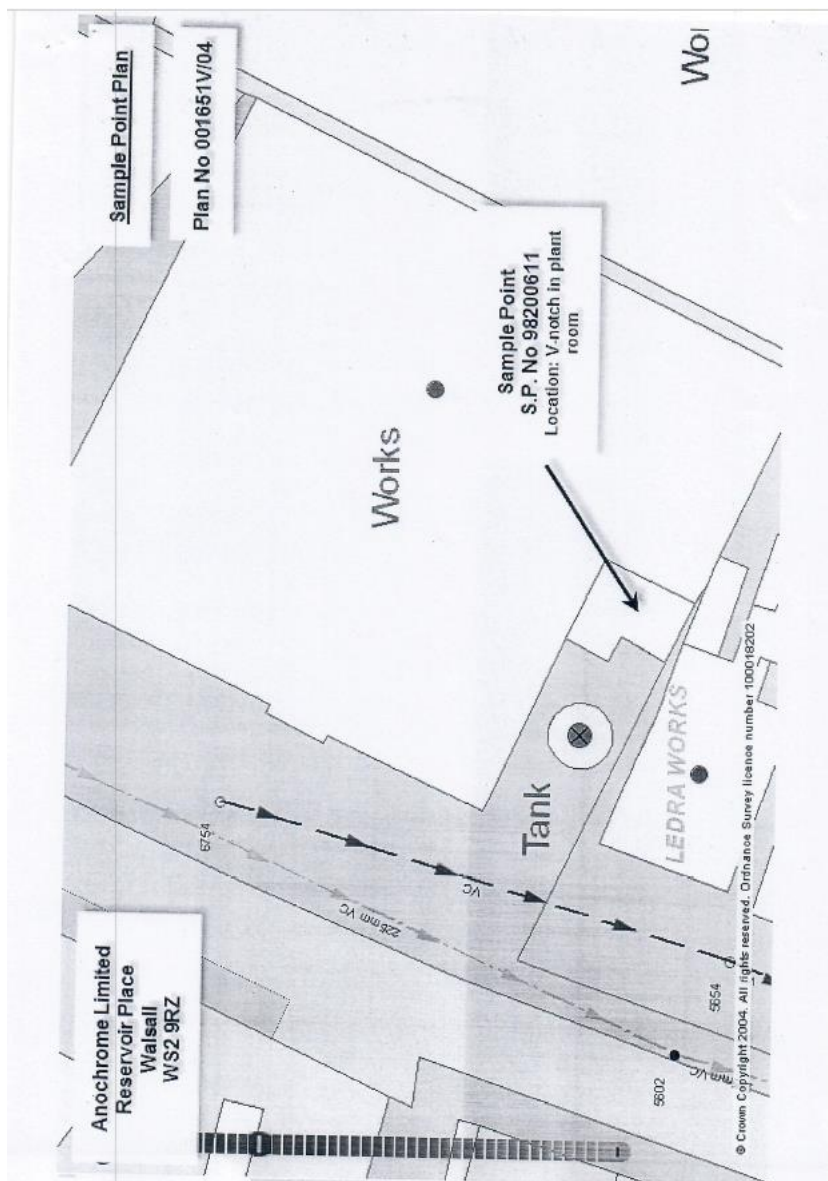
Environmental Monitoring

Consent to Discharge Effluent Monitoring

In accordance with our Consent to Discharge Trade Effluent letter issued by Severn Trent Water Ltd dated 23rd June 2010, Anochrome Limited must comply with the following conditions:

- Trade effluent water must only be discharged to the foul water sewer situated in Reservoir Place.
- The maximum volume of trade effluent to be discharged in any continuous period of 24 hours shall not exceed 750 m³ (cubic meters).
- The highest rate at which the trade effluent may be discharged shall not exceed 15 litres per second.
- The chemical Oxygen Demand (COD) of the trade effluent shall not exceed 600 mg/l (milligrams per litre) expressed as O.
- The total suspended solids in the trade effluent shall not exceed 400 mg/l.
- The pH value of the trade effluent shall not be less than 6 nor greater than 12 in the recognised scale.
- The total of Zinc in the trade effluent shall not exceed 10 mg/l.
- The total of Chromium in the trade effluent shall not exceed 5 mg/l.
- The total of Nickel in the trade effluent shall not exceed 3 mg/l.
- The total of Copper in the trade effluent shall not exceed 2 mg/l.
- The total concentration of Cyanide in the trade effluent, excluding ferrocyanide and ferricyanide, shall not exceed 10 mg/l expressed as CN.
- Based on Mass balance – Mercury in the trade effluent shall not exceed 0.1 Kg annually.
- Based on Mass balance – Cadmium in the trade effluent shall not exceed 1.0 Kg annually.
- The temperature of the trade effluent shall not exceed 43 deg C.
- The trade effluent shall be free from physically separable oil.

- The trade effluent shall not contain any substances which either alone or in combination with any matter in any sewers or receiving sewage treatment works invested in and/or under the control of Severn Trent Water Limited, would give rise to obnoxious, poisonous or inflammable gases, or otherwise a statutory nuisance as defined by the environmental protection act 1990 in such sewers or works, would be deleterious to such sewers or to the processes in use at such works or to the disposal of effluents and sludges produced by such works.
- To enable a representative sample of trade effluent to be taken, a suitable sampling point shall be provided to the satisfaction of the sewerage Undertaker at a point marked “sample point” as shown on the plan No. 001651V/04.
- Sample point is located at the V-notch in the plant room. As per picture below: Please refer to latest permit for more details.



The effluent discharge to foul sewer from the effluent treatment facility is monitored at a minimum frequency of once every three hours. Zinc, cyanide and total chromium levels are determined at least once per working day and nickel once per week to demonstrate compliance with the conditions cited in the Consent to Discharge Trade Effluent letter issued by Severn Trent Water Ltd.

Samples of trade effluent are submitted four times annually to an MCERTS accredited independent laboratory for analyses and comparison with Consent to Discharge Limits for suspended solids, total chromium, total nickel and total zinc. The metals are determined by ICP-MS and suspended solids by filtration and gravimetric analysis.

Conditions of Permit and Reporting to the Environment Agency

In accordance with the Environmental Permitting Regulations 2010 and our permit EPR/BN0112IN, Anochrome Limited must comply with the following conditions and reporting schedule:

Parameter no.	Emission point	Reporting Period	Report ref
Hydrogen Chloride	A1, A2, A3, A4, A5	Annually	A1
Suspended solids	S1	Every 6 months	S1
Free Cyanide CN	S1	Every 6 months	S1
Mercury	S1	Annually	S1
Cadmium	S1	Annually	S1
Chromium	S1	Every 6 months	S1
Zinc	S1	Every 6 months	S1
Flow	S1	Every 6 months	S1
Flow instantaneous	S1	Every 6 months	S1
Water usage	n/a	Annually	WU1
Energy usage	n/a	Annually	E1
Waste Disposal / and recovery	n/a	Annually	R1

Annual emission monitoring to determine the release of hydrogen chloride from the site emission points A1, A2, A3, A4 and A5 is undertaken by an external service provider with analysis performed by an MCERTS accredited independent laboratory. The results are compared with the emission limit value for hydrogen chloride in EPR/BN0112IN which is 10mg/m^3 for each emission point.