INTRODUCTORY NOTE

This Note does not form part of the Variation Notice.

The following Notice is issued under section 10 of the Environmental Protection Act 1990 ("the 1990 Act") to vary the conditions of an Authorisation issued under the 1990 Act to operate an incineration process. The Notice comprises Schedule A containing conditions to be deleted, Schedule B conditions to be amended and Schedule C conditions to be added.

The Notice is subject to the express conditions set out in Schedules A, B and C. Aspects of the process not regulated by those conditions are subject to a general condition implied by section 7(4) of the 1990 Act that the person carrying it on must use the best available techniques not entailing excessive costs:

(a) for preventing the release of substances prescribed for any environmental medium into that medium or, where that is not practicable by such means, for reducing the release of such substances to a minimum and for rendering harmless any such substances which are so released; and

(b) for rendering harmless any other substances which might cause harm if released into any environmental medium.

Techniques include (in addition to technical means and technology) the number, Qualifications, training and supervision of persons employed in the process and the design, construction, layout and maintenance of the buildings in which the process is carried on.

Description of Process

General

The incinerator is situated at the eastern end of Bridges Road some 300 metres from the River Gowy. Its purpose is to incinerate solid and liquid wastes arising from the petrochemical, pharmaceutical, chemical, printing, electrical, chemical and general engineering industries. Wastes acceptable to operation remain as outlined in the plant's original IPC Application.

The plant is designed to operate continuously with a capacity of around 80000 tonne of waste per annum, in its current configuration of 47MW thermal release.

Process Operation

The process comprises the following items:

- Solid waste reception, handling and storage,
- Liquid waste reception, storage and blending,
- Sludge waste reception, handling and storage,
- Drummed liquid waste reception, storage and bulk.
Agitated tanks for blending liquid wastes for on or off site use;
Slagging rotary kiln operation;
Vortex secondary combustion chamber operation;
Heat recovery and quenching;
Gas cleaning;
Effluent treatment;
Slag, ash and sludge handling, processing and recycling or disposal.

The exhaust gases are monitored continuously for flow, temperature, oxygen, carbon monoxide, sulphur dioxide, hydrogen chloride, total organic carbon, oxides of nitrogen and particulate matter.

Liquid effluent is monitored continuously for flow, pH and temperature.

Samples of gaseous and liquid effluents are taken periodically and analysed for trace contaminants.

Vitrified slag, ash and sludge are analysed periodically.

The Company operates an Environmental Management System and undertakes an environmental monitoring programme.

Unit Operations

(i) Solid waste is received in drums, packages or pallets. A statistical sampling and analysis exercise is undertaken on all incoming solid waste consignments. All assessed wastes are stored in covered, fire-protected facilities. Items requiring reprocessing are maintained separately from materials suitable for direct incineration, which are placed on pallets within a racked, fire-protected covered facility. Drums and packages are placed on conveyors in a predetermined sequence for incineration, other suitable wastes are fed by a bin charging system. The drums are fed to the rotary kiln on a conveyor system, passing through an interlocked double-door charging system designed to prevent the egress of waste or combustion products.

(ii) Liquid wastes are received in tankers, drums or bulk containers. The drum contents are assessed prior to pumping to the main storage or feed tanks. Bulk containers are treated similarly. Empty containers are recycled where appropriate or else incinerated. Tanker contents are samples and analysed prior to being pumped to defined storage tanks or, in the case of difficult or odorous waste, fed directly to the incinerator. Sludges may be received in skips or specialised containers and will be sampled and assessed in the same way as bulk liquids.

(iii) The slagging rotary kiln is heated using gas oil to a temperature of over 900°C before solid or liquid waste is fed to it. Sand, glass and recycled slag/Effluent Treatment Plant sludge can be added to the kiln to provide the slagging layer. Inorganic components of the waste become incorporated in the slag and rendered immobile. The slag is removed via a submerged bath conveyor, tested and sent for re-use or disposal via landfill.

(iv) Gases from the rotary kiln are drawn through the secondary combustion chamber where liquid waste and support fuel (gas oil) may be fired separately or in combination. The temperature of the exit gases is typically between 1100°C and 1250°C which, in the presence of excess oxygen, ensures complete burnout of the organic material in the waste gas stream.
(v) The high temperature gas stream leaving the secondary combustion chamber is used to heat air which subsequently reheats scrubbed gases and the final stack gases, in two non-contact heat exchangers. Solids deposited on heat exchangers are quenched and recycled through the incineration process. After heat recovery the gases are quenched and scrubbed to remove acid gases. The heat recovery and quenching systems are designed to avoid subjecting the gas stream to temperature ranges where dioxin reformation may occur.

(vi) Scrubbed gases are re-heated using clean hot air from the heat exchangers, before being injected with hydrated lime and passing into a pre-coat fabric filter for particulate removal. They are then drawn through an induced draft fan, re-heated and discharged to atmosphere via an 86-metre high stack.

(vii) Sections of the gas scrubbing plant are circulated with sodium hydroxide to neutralise acid gases. Cooled scrubbing liquors are neutralised with lime in the effluent treatment plant, in order to precipitate metals. The neutralised liquor passes to flocculation, settlement, solids removal and finally discharge to the River Gowy.

(viii) Slag from the rotary kiln and sludge from the effluent treatment plant are recycled on site, sent for re-use off site or sent to licensed landfill sites. Ash from heat recovery is always recycled on site, whilst metal from the slag sorting process may also be recovered. Cleaned empty drums from liquid bulking may also, in some cases, be re-used.

(ix) Potentially – contaminated surface water is retained for analysis and, if found to be contaminated, directed to incineration.

4. Purpose of Variation

This variation provides for the inclusion in the authorisation of conditions to secure compliance with EU Directive 94/67/EC – The Hazardous Waste Incineration Directive. It also serves to consolidate previous variation notices.

5. Status Log

<table>
<thead>
<tr>
<th>Description</th>
<th>Ref. Number</th>
<th>Issued</th>
<th>Effective Date</th>
<th>Type of Change</th>
</tr>
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<tbody>
<tr>
<td>Amendment</td>
<td>A63233</td>
<td>25/08/93</td>
<td>31/08/93</td>
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<tr>
<td>Amendment 1</td>
<td>A6914</td>
<td>14/11/94</td>
<td>14/11/94</td>
<td>Definition of &quot;day&quot;</td>
</tr>
<tr>
<td>Amendment 2</td>
<td>A7748</td>
<td>18/10/93</td>
<td>23/10/93</td>
<td>Improvement to sampling regime</td>
</tr>
<tr>
<td>Amendment 3</td>
<td>AD3159</td>
<td>27/11/98</td>
<td>30/11/98</td>
<td>Reporting for the ISR</td>
</tr>
<tr>
<td>Amendment 4</td>
<td>BC6901</td>
<td>29/06/00</td>
<td>30/06/00</td>
<td>HWID and consolidation</td>
</tr>
</tbody>
</table>
ENVIRONMENT AGENCY

ENVIRONMENTAL PROTECTION ACT 1990

VARIATION NOTICE

CLEANAWAY LTD

Authorisation Number AG8233

Variation Notice Number BI6961

The Environment Agency in exercise of its powers under Section 10 of the Environmental Protection Act 1990 (the “1990 Act”) hereby varies the Authorisation, Number AG8233, as varied, held by,

CLEANAWAY LTD

(“the Company”)

whose Registered Office is

The Drive
Warley
Brentwood
Essex
CH13 3BE

It relates to the Authorised Process carried on at the premises occupied by the Company at

Bridges Road
Ellesmere Port
Cheshire
L65 4EQ

It to the conditions of this Notice

This Notice shall have effect from 30 June 2000.

[Signature]

I am authorised to sign on behalf of the Environment Agency

Dated the 29th June 2000
SCHEDULE A

A. CONDITIONS TO BE DELETED

A.1 All conditions set out in Parts 1 to 6 inclusive of authorisation AG8233 dated 23 August 1993.

A.2 The conditions in the Schedule to Variation Notice AN6914 (11 November 1994).

A.3 The conditions in Schedule 3 to Variation Notice AT7448 (18 October 1995).

The conditions in Schedules B and C to Variation Notice BD3159 (23 November 1998).

SCHEDULE B

CONDITIONS TO BE AMENDED

None.

SCHEDULE C

CONDITIONS TO BE ADDED

Conditions set out in Parts 1 to 7 (B16961) following, including Schedules 1 and 2, shall be added to authorisation AG8233.
PART

OPERATION OF PROCESS

The Authorised Process shall be carried on using the plant and equipment described in the application, subsequent notifications and the management system documentation.

The Company shall maintain in good operating condition all plant and equipment used in carrying on the process.

The Authorised Process shall, subject to the provisions of this authorisation, be carried on in the manner described in 1.1 above.

The Authorised Process shall be managed and operated by sufficient persons who are suitably qualified, experienced and trained for the duties to be undertaken in connection with the carrying out of the process. An organisation chart shall be maintained as part of the management system documentation.

The Company shall provide the persons mentioned in condition 1.4 with appropriate written operating instructions for the carrying on of the Authorised Process.

Wastes shall only be accepted which comply with the description given in the application.

The quantity of waste accepted for incineration shall not exceed 100,000 tonnes per year.

No waste shall be accepted for incineration if there is insufficient space to accommodate it within the areas designated for storage in the application.

All wastes delivered to the site for treatment shall be evaluated prior to storage to ensure that prescribed substances released from the process are minimised and wastes are not mixed which could react to produce an uncontrolled release.

Incompatible wastes shall be segregated and stored separately in accordance with the procedures described in 1.1.

The Company shall maintain a system of ensuring that the generic contents of the bulk waste storage tanks are identified at all times.

The Company shall maintain a system of ensuring that discrete containers of waste are marked in such a way that the contents and date of receipt are identifiable.

All potentially contaminated surface water shall be collected and analysed prior to disposal or prior to re-use shall be treated out only on an impermeable, hard surface.

The Company shall maintain back-up electrical supplies to ensure the controlled shut down of waste in the event of loss of grid supplies.
SAMPLING AND MONITORING

1.16 Safe and permanent means of access shall be provided to the sampling and monitoring points specified in Schedule 1. A safe means of access shall be provided to other sampling and monitoring points when required by the Agency.

1.17 The Company shall take such samples and carry out such analyses, calibrations, examinations, measurements, tests and surveys as –

(a) are necessary for the purposes of this authorisation;

(b) the Agency may reasonably require,

and shall provide the Agency with such samples and information in respect of such analyses, calibrations, examination, measurements, tests and surveys as he may reasonably require.

RECORDS

1.18 The Company shall make a record of all samples, analyses, calibrations, examinations, measurements, tests and surveys taken or carried out as required by condition 1.17 ("relevant records").

19 Relevant records and any other records of samples, analyses, calibrations, examinations, measurements, tests and surveys made by the Company in the course of carrying on the process ("process records") shall be available for inspection by the Agency at any reasonable time.

Relevant records and process records shall –

(a) be made as soon as reasonably practicable after the sample is taken or the analysis, calibration, examination, measurement, test or survey is carried out.

(b) if amended, be amended in such a way as to leave the original record legible.

The Company shall –

(a) supply on demand and without charge a copy of relevant records and process records as the Agency may require;

(b) retain relevant records for a period of four years from the date when the records were made and process records for a period of one year from the date when the records were made.

A record shall be kept for years of every delivery of waste to the site. The record shall include:

- the date and time of arrival on site,
- a copy of the transfer note,
- the type and quantity of wastes,
- details of the types and number of samples taken,
- the results of analysis of the samples,
- how the waste has been categorised for storage purposes,
- details of where the wastes will be stored prior to treatment
- the unique receipt reference
A record shall be kept for 2 years of every despatch of waste and residues from the site. The record shall include:

(a) the date and time of despatch,
(b) a copy of the transfer note,
(c) the type and quantity of wastes or residues,
(d) the results of analysis of any samples taken prior to despatch,
(e) the address of the destination of the wastes or residues.

See 7.1

EJECT LOADS

Any vehicle delivering waste to the site which does not meet the description given in the transfer note or for which there is no transfer note or that cannot otherwise be accepted, shall be directed to a reject load area.

Pending the removal of unacceptable waste deliveries, they shall be identified and securely stored to prevent incorporation into other wastes.

The Agency's Special Waste function at the Reporting Address shall be informed of the delivery of all unacceptable loads. A record shall be kept of all such deliveries. The record shall include the information listed in condition 1.22 plus:

(a) reason why the load is unacceptable,
(b) the date and time the Agency's Special Waste function was informed,
(c) the vehicle registration number, driver's name, waste producer's name and address and next destination of the vehicle/waste.

IFICATIONS

The Company shall notify the Agency

(a) of the detection of the release of any substance which exceeds any relevant limit in this authorisation;

(b) of the detection of the release of any other substance which might cause harm except in a quantity so trivial that it would be incapable of causing harm or its capacity to cause harm is insignificant;

(c) of any malfunction or breakdown of the Authorised Process, with a potential to cause releases requiring notification under paragraphs (a) and (b).

Notification under condition 1.28 shall be made to the Agency, on Part A of Form B in Schedule 2, at the Reporting Address as soon as practicable and in any event within 72 hours by fax. As soon as practicable thereafter the Company shall complete Part B of Form B in Schedule 2 and send it to the Agency.
1.30 In the event of an unauthorised release to controlled waters of a prescribed substance or any other substance in a quantity which might cause harm the Company shall also inform the Agency on telephone number 0800 807060 as soon as practicable and in any event within 24 hours of the detection of the release.

31 Any person having duties which are or may be affected by the matters set out in the authorisation shall have convenient access to a copy of this document kept at or near to the place where he carried out those duties.
PART 2

RELEASES INTO AIR

1. Releases to air from the 80-metre stack shall not exceed the concentrations stated in Column 2 of Table 2.1.

1.2 The slagging rotary kiln shall only be operated if the secondary combustion chamber is fully operational.

The gases in the secondary combustion chamber shall normally be subject to a temperature of not less than 1100°C for a period of not less than 2 seconds in an excess oxygen environment. Oxygen levels shall be at least 6 volume percent taken on a daily average basis, with 30 minute averages always exceeding 3 percent. Deviations from the temperature conditions shall be monitored and recorded, but waste feed shall automatically cease if the temperature falls below 900°C.

The concentration of carbon monoxide after the last injection of air shall not exceed the following limits:

(a) 50 mg/m³ of combustion gas determined as a daily average value;

(b) 100 mg/m³ of combustion gas – for all measurements determined as 30 minute average values in the 24-hour period, or 150 mg/m³ of combustion gas – for at least 95% of all measurements in a year determined as 10 minute average values.

The process shall be operated so that during the burning of waste the releases from the 80-metre stack are free from visible smoke, water droplets, fume and persistent mist.

The process shall be operated so that during the burning of waste the plume arising from the releases from the 80-metre stack, attributable to water vapour, is invisible under all meteorological conditions excepting extreme cold or high relative atmospheric humidity.

The process shall be controlled so that releases from other than the 80-metre stack are as low as reasonably practicable.

The release of odours from the process shall be as low as reasonably practicable.
<table>
<thead>
<tr>
<th>Substance</th>
<th>Concentration limit mg/m$^3$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total organic carbon*</td>
<td>10 (20)</td>
</tr>
<tr>
<td>Particulate*</td>
<td>10 (30)</td>
</tr>
<tr>
<td>Hydrogen chloride*</td>
<td>10 (60)</td>
</tr>
<tr>
<td>Hydrogen fluoride</td>
<td>1</td>
</tr>
<tr>
<td>Sulphur dioxide*</td>
<td>50 (200)</td>
</tr>
<tr>
<td>Oxides of nitrogen (as NO$_2$)</td>
<td>350</td>
</tr>
<tr>
<td>Dioxins (Toxic Equivalent)</td>
<td>$0.1 \times 10^4$</td>
</tr>
<tr>
<td>Cadmium + thallium</td>
<td>0.1</td>
</tr>
<tr>
<td>Mercury</td>
<td>0.1</td>
</tr>
<tr>
<td>Other metals (1)</td>
<td>1.0</td>
</tr>
</tbody>
</table>

*continuously monitored

'Other metals' are antimony, arsenic, chromium, cobalt, copper, lead, manganese, nickel, tin and vanadium taken together.
The Company shall monitor the exhaust gases continuously for the following parameters:

- hydrogen chloride;
- carbon monoxide;
- oxides of sulphur;
- total hydrocarbon (expressed as total organic carbon);
- oxygen;
- particulate matter.

For the continuously monitored items, compliance with the limits in Table 2.1 may be demonstrated if daily averages for the 24 hour period do not exceed the values shown. In addition, either 100% of the half-hourly average readings for the 24-hour period must not exceed the value in parentheses, or 97% of half-hourly averages must not exceed the specified limit value in a year. All data shall be corrected to 273K, 101.3kPa, 11% oxygen, dry gas. Averages shall be calculated after deducting the following 95% confidence values from the initial corrected data:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CO</td>
<td>10%</td>
</tr>
<tr>
<td>SOx</td>
<td>20%</td>
</tr>
<tr>
<td>NOx</td>
<td>25%</td>
</tr>
<tr>
<td>Dust</td>
<td>30%</td>
</tr>
<tr>
<td>TOC</td>
<td>30%</td>
</tr>
<tr>
<td>HCl</td>
<td>40%</td>
</tr>
</tbody>
</table>

The Company shall carry out a programme of sampling of exhaust gases at the point specified in Schedule 1 and shall analyse for the following substances at the stated frequencies:

- oxides of nitrogen quarterly
- metals quarterly
- hydrogen fluoride quarterly
- sulphur dioxide quarterly
- particulate matter quarterly
- dioxins annually

Measurement of dioxin concentration in the exhaust gases shall be carried out when materials containing organic chlorine compounds are being incinerated. An estimate of the concentration of these compounds in the feedstock shall be provided with the results of the exhaust gas analyses.

See 7.2

In the event of a continuing breach of one or more release limits the Company shall cease the feeding of waste to the incinerator.

The Company shall not resume the feeding of waste to the incinerator without the express permission of the Agency.
In the event of failure of the fabric filter the Company shall cease the feeding of waste within a period of four hours from the start of the failure.

The cumulative duration of operation in the event of such failures shall not exceed 60 hours per year.

In the event of the failure of one or more of the continuous release monitors, provided under Condition 2.9, the Company shall cease the feeding of waste if any process parameter or observation indicates that one or more of the concentration limits in Table 2.1 has been exceeded. In such circumstances the feeding of waste shall cease within a period of four hours from the time the exceedance was indicated.

The cumulative duration of operation in the event of continuous release monitor failure and coincident exceedance of a concentration limit shall not exceed 60 hours per year.

The Company shall keep a record of the events outlined in 2.12, 2.13 and 2.14 above.
PART

RELEASES INTO WATER

No release from the Authorised Process shall be made into any public sewer.

Releases into controlled waters from the Authorised Process shall consist only of effluents from the flue gas cooling and scrubbing and uncontaminated site surface water. The releases shall be made only to the River Gowy via the outlet situated at OS NGR 51 429 761.

The determinedness measured in releases from the Authorised process into controlled waters shall not exceed the limits or criteria specified in Table 3.1.

There shall be no release from the Authorised Process to controlled waters of polychlorinated biphenyl compounds except in a concentration no greater than that in the influent water to the process. Compliance is demonstrated by comparing the mathematical products of the mean substance concentrations and total volume flows of effluent and influent over a rolling seven day period during which time a minimum of three samples shall be analysed. The samples for analysis shall be obtained from the continuous sampling equipment and the minimum sampling period shall be 24 hours.

There shall be no release from the Authorised Process to controlled waters of any other substance prescribed in Schedule 5 to SI 1991 No.472 The Environmental Protection (Prescribed Processes and Substances) Regulations 1991 except in quantities no greater than that in the influent water to the process.

There shall be no release from the Authorised Process to controlled waters of any other substance which might cause harm except in an incremental quantity, compared with influent water, so trivial that it would be incapable of causing harm or its capacity to cause harm is insignificant.

See 7.3.
<table>
<thead>
<tr>
<th>Determinant</th>
<th>Units</th>
<th>Limit Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH maximum (a)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pH minimum (a)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydrocarbon oil (d)</td>
<td>mg/litre</td>
<td>5</td>
</tr>
<tr>
<td>Biochemical oxygen demand (ATU) 5 days @ 20°C (c)</td>
<td>mg/litre</td>
<td>10 (d)</td>
</tr>
<tr>
<td>Suspended solids (b)</td>
<td>mg/litre</td>
<td>10 (d)</td>
</tr>
<tr>
<td>Temperature maximum (a)</td>
<td>°C</td>
<td>5</td>
</tr>
<tr>
<td>Cadmium + Thallium (c)</td>
<td>g</td>
<td>45</td>
</tr>
<tr>
<td>Mercury (c)</td>
<td>g</td>
<td>mass (l)</td>
</tr>
<tr>
<td>Other metals (c) (f)</td>
<td>g</td>
<td>mass (l)</td>
</tr>
<tr>
<td>Volatile (d)</td>
<td>m3/day</td>
<td>9000</td>
</tr>
</tbody>
</table>

(a) To be monitored continuously.

(b) To be analysed at a frequency of no less than three times per rolling seven day period. The samples for analysis shall be obtained from the continuous sampling equipment and the minimum sampling period shall be 24 hours.

(c) To be analysed quarterly. In each year one set of analyses shall be undertaken by an accredited independent laboratory.

(d) These are incremental limits. Compliance is demonstrated by comparing the concentrations of the determinedness in the effluent with the corresponding values found in the influent water abstracted from the River Gowy at OS NGR SJ 426 759.

(e) Overall compliance with these limits is demonstrated if 95% of the results of analysis are within the limit values.

(f) Compliance is demonstrated if the incremental mass release to water is less than the mass release to air, calculated from the limits in Table 2.1 and the stack gas flows.

‘Other metals’ are antimony, arsenic, chromium, cobalt, copper, lead, manganese, nickel taken together.
PART 4

OTHER RELEASES FROM THE PROCESS

The Company shall, in respect of any release from the Authorised Process other than into air or into controlled waters, record—

(a) the composition, or as appropriate, a description of the release;

(b) the best estimate of the quantity of the release; and

(c) how the release was disposed.

The Company shall ensure that slag from the kiln and sludge from the Effluent Treatment Plant are analysed at a frequency of no less than once per year for the following contaminants:

- organic solvents (by percentage volatilisation in the temperature range 110 - 550°C);
- polychlorinated biphenyls.

See 7.4.
PART 5

IMPROVEMENT PROGRAMME

The requirements described in column 2 of Table 5 shall be completed by the date shown in column 3 of that table.

<table>
<thead>
<tr>
<th>Reference (1)</th>
<th>Requirement (2)</th>
<th>Date (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1</td>
<td>The company shall send to the Agency at the Reporting Address details of its programme of environmental monitoring for the period up to 31 December 1994.</td>
<td>Completed</td>
</tr>
<tr>
<td></td>
<td>The Company shall send to the Agency at the Reporting Address any details of analyses for dioxins and furans carried out on slag from the rotary kiln, ash from the heat recovery plant and sludges from the effluent treatment plant.</td>
<td>Completed</td>
</tr>
<tr>
<td></td>
<td>The Company shall send to the Agency at the Reporting Address proposals for demonstrating compliance with conditions 3.5 in Part 3</td>
<td>Completed</td>
</tr>
<tr>
<td></td>
<td>The Company shall conduct a review of its sampling and analysis procedures for the acceptance of drummed waste and shall send a summary of the results of the review to the Agency at the Reporting Address.</td>
<td>Completed</td>
</tr>
<tr>
<td></td>
<td>The Company shall investigate the availability of non-invasive techniques for obtaining information on the chemical composition of drummed waste and shall submit a report on that investigation to the Agency at the Reporting Address.</td>
<td>Completed</td>
</tr>
<tr>
<td></td>
<td>The Company shall provide a report to the Agency at the Reporting Address verifying the operating parameters specified in Condition 2.3 (Article 6.4 of Directive 94/67/EC).</td>
<td>31 2/00</td>
</tr>
</tbody>
</table>
INTERPRETATION

In this authorisation the following expressions have the meanings hereby assigned to them.

"the application" means the application by the Company dated 16th October 1992 and response dated 23rd April 1993 to a notice dated 1st April 1993 served under Schedule 1 to the 1990 Act; and any other written notification from the Company and accepted by the Agency;

"controlled waters" has the same meaning as in Part III of the Water Resources Act 1991;

"day" means any period of 24 consecutive hours commencing at 00:00;

"management system" includes systems accredited to ISO 9002, ISO 14001 and other environmental and safety management systems;

"prescribed substance" means a substance prescribed by regulation 6 of the Environmental Protection (Prescribed Processes and Substances) Regulations (S.I. 1991/72);

"public sewer" has the same meaning as in the Water Industry Act 1991;

"Reporting Address" means the address, from time to time notified to the Company, for that purpose by the Agency in writing;

"year" means calendar year;

"continuously" with reference to flue gas monitoring means during the whole time that waste is being incinerated, allowing for limited periods of non-availability of instrumentation for self-calibration and maintenance.

Unless otherwise stated, references to the concentration of a substance in a release to air (whether measured by continuous monitoring equipment or by any other method) means the concentration in dry air at a temperature of 273K, at a pressure of 101.3kPa and with an oxygen content of 11% dry.

Limits on oxides of nitrogen are expressed as nitrogen dioxide equivalent.

Reference to "Dioxins (Toxic Equivalent)" means the sum of the products of the individual concentrations of polychlorinated dibenzo-p-dioxins/polychlorinated dibenzofurans and their equivalence factors as in Annex 1 of European Directive 94/67/EC.

Any reference to the notification of information using a form set out in Schedule 2 may be made using a form substantially to the like effect as the form referred to.
PART 7

REPORTING REQUIREMENTS

Within 28 days of the end of the year to which the records refer a report shall be made to the Agency detailing the total of each of the wastes received at and waste and residues despatched from the site taken from the records required by conditions 1.22 and 1.23.

7.2 The Company shall send to the Agency at the Reporting Address, within 21 days of receipt of the analyses specified in condition 2.10, the results obtained.

The Company shall send to the Agency at the Reporting Address within 21 days of the end of every calendar quarter a summary of the measurements taken to demonstrate compliance with conditions 3.3 and 3.4.

The Company shall send to the Agency at the Reporting Address by 31 January each year a summary of the measurements taken to demonstrate compliance with condition 4.2.

The Company shall by not later than 31 January in each year:

(a) complete an ISR Reporting Form in respect of the operation of the Authorised Process during the previous year, in accordance with the instructions and definitions included with the Form. This is in addition to any other requirement in this Authorisation for the reporting of annual releases;

(b) send the completed Form to the Agency at the Reporting Address, with 2 copies thereof; and

(c) make a record of the calculations, estimations and assumptions made in determining the annual releases reported on the ISR Reporting Form. This record shall be retained for a period of not less than 4 years.
SCHEDULE 1
Monitoring Points

Condition 2.10  The sampling point at the 30-metre platform on the 80-metre stack.

Condition 3.3 – The outlet from the cooling water storage pond.
NOTIFICATIONS OF UNAUTHORISED RELEASES

Company

<table>
<thead>
<tr>
<th>Location</th>
<th>Date of Return</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>PART A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of the prescribed substance or other substance which might cause harm.</td>
</tr>
<tr>
<td>Date and location of the release</td>
</tr>
<tr>
<td>Estimate of the quantity of the substance released or date of release and the time during which the release place.</td>
</tr>
<tr>
<td>Environment medium into which the release took place.</td>
</tr>
<tr>
<td>Measures taken, or intended to be taken, to stop the</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PART B</th>
</tr>
</thead>
<tbody>
<tr>
<td>More accurate information on the quantity of substance released or the date of the release.</td>
</tr>
<tr>
<td>Measures taken, or intended to be taken, to prevent a recurrence of the incident.</td>
</tr>
<tr>
<td>Measures taken, or intended to be taken, to rectify or prevent environmental damage which has been or may be caused by the release.</td>
</tr>
<tr>
<td>Dates of any unauthorised releases from the process have taken place in past 2 years.</td>
</tr>
</tbody>
</table>

(a) If information supplied in the notification is considered confidential, a statement of which information this applies to and the reasons why must be supplied.

(b) Units used in Part A and Part B shall be the same as those specified for similar releases in this authorisation.
ENVIRONMENTAL PROTECTION ACT 1990

Variation Notice
and
Introductory Note

Cleanaway Ltd

Ellesmere

Authorisation Number AG8233

Variation
INTRODUCTORY NOTE

This Note does not form part of the Variation Notice.

The following Notice is issued under section 10 of the Environmental Protection Act 1990 ("the 1990 Act") to vary the conditions of an Authorisation issued under the 1990 Act to operate an incineration process. The Notice comprises Schedule A containing conditions to be deleted, Schedule B conditions to be amended and Schedule C conditions to be added.

The Notice is subject to the express conditions set out in Schedules A, B and C. Aspects of the process not regulated by those conditions are subject to a general condition implied by section 7(4) of the 1990 Act that the person carrying it on must use the best available techniques not entailing excessive costs:

(a) for preventing the release of substances prescribed for any environmental medium into that medium or, where that is not practicable by such means, for reducing the release of such substances to a minimum and for rendering harmless any such substances which are so released; and

(b) for rendering harmless any other substances which might cause harm if released into any environmental medium.

Techniques include (in addition to technical means and technology) the number, qualifications, training and supervision of persons employed in the process and the design, construction, layout and maintenance of the buildings in which the process is carried on.

IN 3. Description of Process

No change

IN 4. Purpose of Variation

To give effect to the Secretary of State's Hazardous Waste Incineration Direction 1998.
<table>
<thead>
<tr>
<th>Description</th>
<th>Ref. Number</th>
<th>Issued</th>
<th>Effective Date</th>
<th>Type of Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authorisation</td>
<td>AG8233</td>
<td>25/08/93</td>
<td>31/08/93</td>
<td></td>
</tr>
<tr>
<td>Variation 1</td>
<td>AN6914</td>
<td>11/11/94</td>
<td>14/11/94</td>
<td>Definition of 'day'</td>
</tr>
<tr>
<td>Variation 2</td>
<td>AT7448</td>
<td>18/10/95</td>
<td>27/10/95</td>
<td>Improvement to sampling regime</td>
</tr>
<tr>
<td>Variation 3</td>
<td>AD3159</td>
<td>27/11/98</td>
<td>30/11/98</td>
<td>Reporting for the ISR</td>
</tr>
<tr>
<td>Variation 4</td>
<td>BI6961</td>
<td>29/05/00</td>
<td>30/05/00</td>
<td>HWID and consolidation</td>
</tr>
<tr>
<td>Variation 5</td>
<td>JK09723</td>
<td>25/05/01</td>
<td>30/08/01</td>
<td>S&amp;S 1998 HWID Direction</td>
</tr>
</tbody>
</table>
ENVIRONMENT AGENCY

ENVIRONMENTAL PROTECTION ACT 1990

VARIATION NOTICE

CLEANAWAY LTD

Authorisation Number AG8233

Variation Notice Number BK9725

The Environment Agency in exercise of its powers under Section 10 of the Environmental Protection Act 1990 ("the 1990 Act") hereby varies the Authorisation, Number AG8233, as varied, held by,

CLEANAWAY LTD

("the Company")

Whose Registered Office is

The Drive
Warley
Brentwood
Essex
CH13 3BE

Which relates to the Authorised Process carried on at the premises occupied by the Company at

Bridges Road
Ellesmere Port
Cheshire
L65 4EQ

subject to the conditions of this Notice.

This Notice shall have effect from June 2006.

Signed

A K Morton, authorised to sign on behalf of the Environment Agency

Dated the 25 May 2006

Authorisation AG8233/BK9725
SCHEDULE A

A. CONDITIONS TO BE DELETED

None

SCHEDULE B

B. CONDITIONS TO BE AMENDED

B. After the word "application" in Condition 1.6 the following shall be added "and which have been considered against the criteria in Schedule 3"

B.2 In Condition 2.10 after the word "dioxins" replace the word "annually" with "biannually"

SCHEDULE C

C. CONDITIONS TO BE ADDED

2.16 During start-up and shutdown or when the temperature of the combustion gas falls below 900°C the burners shall not be fed with fuels which can cause higher emissions than those resulting from the burning of gas oil as defined in Article 1(1) of Directive 75/716/EEC, liquefied gas or natural gas

C.2 2.17 The Company shall employ the monitoring techniques given in Annex III (paragraphs 1,2 and 3) of Directive 94/67/EC in respect of Conditions contained in Part 2 of the authorisation

3 Schedule 3 Waste Feedstock
**SCHEDULE 3**

**LIST 'A'**

**Criterion**

Wastes forming the main feedstock components to the process.

**Type of Waste**

**Organic Compounds**

Hydrocarbons
- Aliphatic hydrocarbons
- Aromatic hydrocarbons

Phenols, analogues and derivatives
- Chlorinated phenols and analogues

Peroxides

Halogenated cleaning compounds
- Trichloroethylene
- Perchloroethylene
- Trichlorethane
- Trichlorotrifluoroethane
- Others

Halogenated compounds excluding cleaning compounds
- PCB's and analogues
- Other halogenated hydrocarbons
- Other halogenated organics e.g. Chlorinated dioxins

Organo metallics
- Tetra ethyl lead
- Tetra methyl lead
- Others

Nitrogen, sulphur or phosphorus containing compounds
- Amines and amides
- Nitro compounds
- Nitriles
- Isocyanates
- Other organo nitrogen compounds

Organophosphorus compounds
- Organo sulphur compounds

Oxygen-containing compounds
- Esters and ethers
- Aldehydes and Ketones
- Alcohols

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Authorisation AG8233/BK9725


2) **Organic Acids and related Compounds**

   All
   - Aliphatic acids e.g. formic, acetic and oxalic acids
   - Aromatic acids e.g. benzoic, phthalic acids
   - Acid anhydrides e.g. acetic, phthalic anhydrides
   - Acid chlorides e.g. acetyl, benzoyl chlorides
   - Sulphonic acids
   - Others

3) **Polymeric Materials and Precursors**

   Precursors, monomers and products of incomplete polymerisation
   - Epoxy resins (not finished products)
   - Polyester resins (not finished products)
   - Phenol-formaldehyde resins (not finished products)

   Finished products and manufacturing scrap
   - Polyurethane
   - Other resins and polymeric materials

   Scrap rubber (including tyres)

   Latex, latex and rubber solutions and suspensions

   Synthetic adhesive wastes

   Ion exchange resins wastes

4) **Fine Chemicals and Biocides**

   Pharmaceuticals and cosmetic products
   - Pharmaceutical products in retail containers
   - Pharmaceutical products in bulk and production containers

   Biocides
   - Pesticides
   - Herbicides
   - Fungicides
   - Other biocides
5) **Other Inorganic Materials**

- Slag including boiler and flue cleanings
- Mineral processing wastes
- Silt and dredgings
- Water (contaminated)
- Metal scrap
  - Ferrous metal scrap
  - Non-ferrous metal scrap
  - Metal catalysts

6) **Interceptor Wastes, Tars, Paint, Dyes and Pigments**

- Tank cleanings (sludge content)
- Interceptor pit wastes
- Printing industry wastes (ink manufacture and use)
- Dyestuffs waste
- Distillation residues
- Acid tars
- Tar, pitch, bitumen and asphalts
- Paint waste (manufacture and use)

**Fuel, Oils and Greases**

- Mineral oils
- Kerosene and Derv
- Fuel Oil
- Vegetable and other oils
- Oil/Water mixtures
- Fats, waxes and greases
8) **Miscellaneous Chemical Waste**
- Mixed organic compounds
- Mixed inorganic compounds
- Unidentified chemical waste

Organics identified by trade names
Inorganics identified by trade name
Fertiliser waste
Waste treated timber
Soaps
Detergents
Glue wastes

9) **Filter Materials, Treatment Sludge and Contaminated Rubbish**
- Used filter materials eg: kieselguhr, carbon, filter cloths
- Contaminated rubbish (including bags and sacks)
- Empty used containers
- Industrial effluent treatment sludge

10) **Acids and Alkalis**
- Sulphuric acid
- Alkali metal oxides and hydroxides
- Proprietary alkaline cleaners
- Sodium and potassium carbonates
**LIST 'B'**

**Criterion**

Wastes present as contaminants in the main feedstock or processed in irregular, small quantities. The acceptance of significant quantities of these wastes may constitute a 'relevant change' to the process (as defined in the Act).

### Type of Waste

1) **Inorganic Acids**
   - Hydrochloric acid
   - Nitric acid
   - Chromic acid
   - Phosphoric acid
   - Hydrofluoric acid
   - Others

2) **Alkalis**
   - Ammonia

3) **Toxic Metal Compounds**
   - Cadmium
   - Mercury
   - Lead
   - Arsenic
   - Copper
   - Zinc
   - Barium (Water soluble forms)
   - Thallium
   - Nickel
   - Vanadium
   - Silver
   - Chromium
4) **Metals (Elemental)**

- Cadmium
- Aluminium
- Magnesium

5) **Metal Oxides**

- Hazardous oxides
  - Cadmium oxide
  - Beryllium oxide

- Other oxides
  - Chromium
  - Cobalt
  - Molybdenum

6) **Inorganic Compounds**

- Cyanides
  - Sodium and potassium cyanides
  - Soluble complex cyanides
  - Ferro and ferri cyanides
  - Other cyanides

- Others which liberate toxic gases on acidification
  - Sulphides, selenides, tellurides and arsenides

- Oxidising compounds
  - Hypochlorites and chlorites
  - Chlorates, perchlorates, bromates, persulphates and permanganates
  - Peroxides

- Toxic compounds
  - Chromates
  - Fluorides, silicofluorides, borofluorides
  - Arsenates and arsenites

- Others
  - Carbides and acetylides
  - Borates
  - Nitrates
  - Nitrates
7) **Miscellaneous Wastes**
   Tannery and fellmongers waste
   Tannery waste
   Fellmongers waste
   Cellulose wastes (natural and synthetic)

8) **Animal Food Wastes**
   Animal processing wastes
   Food processing wastes (including starch)