

SEPA
7 Whitefriars Crescent
Perth
PH2

[REDACTED]

Date : 28th April 2009

Dear Sir,

- (A) ----- A Safer Scotland !
- (B) ----- A Smarter Scotland !
- (C) ----- A Healthier Scotland !

We do require a Safer Scotland, a Smarter Scotland, and a Healthier Scotland, yet the Perth and Kinross planning authorities have failed miserably to give any credible thought regarding granting planning permission for the Binn Farm waste incinerator to be located near Glenfarg.

In the City of Perth we are also faced with a request for a second incinerator plant to be built in the harbour area. One can understand the problems of finding suitable landfill sites, which also applies to all authorities throughout Britain. However we must apply stringent and careful technical forward thinking and know-how before we commit to poisoning not only Perthshire and Tayside, but Scotland itself.

Edward Heath gave away our birthright to our coastal waters.

Margaret Thatcher destroyed our manufacturing base, resulting in dependence on service industries.

Gordon Brown has now decimated our banking system and taken Britain to her knees.

Parliamentarians should think very, very carefully regarding Energy Waste Plant Companies, who claim to be able to handle noxious gases, yet have no idea of the composition of the toxic chemicals discarded in the first instance. Dioxin, which can be present in our garden waste, will be discharged and eventually poison our land, the oceans, and our population. Reference should be made to the closure of the Falkirk and Bonnybridge waste plant which created serious health risks.

No doubt Energy Waste Plant Operators will attempt to restrict toxic waste emissions by fitting the minimum dust collection plants necessary to meet local requirements. These specifications should be set by insisting on higher efficiency ratings of over 99% for fume or dust particle emissions from the chimney. It should be noted that the energy waste plant owners are not the specialists for designing fume or dust collection plants. It is therefore incumbent for the authorities to lay down and specify stringent conditions to ensure compliance with a tightly controlled specification, otherwise resulting in the closure of the plant.

The U.K. government has recently launched an £11m five-year research programme into ocean acidification by the emission of CO₂, which alters the oceans' chemistry. No doubt it will also affect our rivers and lochs leading to the poisoning of fish.

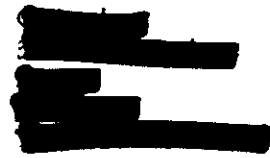
We are also informed of radioactive coolant being discharged into Loch Long from nuclear submarines based at Faslane. Apparently, according to the MOD, we are unable to do anything about this. However we can do something positive about insisting that Energy Waste Plants be sited away from valleys and glens, and operated under stricter, regulated controls.

Please find enclosed a copy of my objection to Energy Waste Plants in Perthshire, and also sketches of potential dust and fume collectors which I am certain will have improved over the years since my retirement. Note, from my own design experience of these mechanical filtration plants, the Americans had developed Electrostatic Precipitators to a higher standard than those in Europe.

Yours sincerely

[REDACTED]

Perth and Kinross Council,
The Environment Services,
Pullar House,
35 Kinnoull Street,
Perth, PH1 5GD



Dear Sirs,

Date: 28th April, 2009.

Objection to Energy Waste Plants in Perthshire; Reference No. 09/00348/REM

Representatives from Grundon Waste Management confirmed that they could handle 90,000 tonnes per annum of non-hazardous household waste, commercial / business waste, and waste from landfill sites in Perth. The process would be closely monitored with stringent conditions on emissions, without a threat to the public!

They gave assurances that there would be no discharge of effluent into the River Tay.

In the Perthshire Advertiser, Tuesday 21st April, 2009, under the heading *Incinerator will 'not affect health'*, it was stated that "Modern EfW plants are highly efficient at carrying out three main functions - burning residual waste left after recycling as a sustainable alternative to landfill, cleaning up the emissions to atmosphere to meet exacting EU standards, and generating non-fossil fuel heat and power. These functions would be monitored by SEPA under the conditions of a site Pollution Prevention Control Permit. These new plants would demonstrably have no adverse impact on the local environment or on local health!"

However I remain unconvinced, and object strongly to incineration waste plants being built in Perth for the following reasons:

- (1) It would appear Perth and Kinross authorities have not taken into account the valid reasons for closing the incineration waste plant which until recently operated between Falkirk and Bonnybridge. One reason for closing this incineration plant relates to failure to prevent the escape into the atmosphere of one of a great many noxious chemicals, such as dioxin, a chemical substance found in some weedkillers which when discharged into the air can cause birth defects, cancers and many other diseases. These chemicals are widely used by farmers and gardeners to kill weeds. A representative from the Tay Energy Action Group confirmed that the outfall of minute dioxin particles alone are unable to be captured by present day waste incineration plants.
- (2) High temperature incineration waste plant operators are completely unaware of the chemical breakdown of waste discarded and incinerated at their plants. SEPA confirms that fly tipping is a big problem in Scotland, with over 40,921 incidents reported in 2006 -7 alone. Further toxic wastes can be processed in the incinerator by illegal dumping from other areas of Britain, and could lead to health problems in Perthshire, and Tayside.
- (3) Additional costs to taxpayers will be incurred for maintaining road systems in Perthshire, and by unsolicited vehicles dumping toxic waste that may require collection by the council, thus adding to congestion and cost.
- (4) The 262 foot chimney is considered by some to carry dust away in a straight line. However prevailing weather conditions produce a cyclonic pattern in the atmosphere, whereby microscopic discharged gas particles can on their rotational orbit return and land back in the area where emission occurred. Climate change suggests heavier rainfalls in Scotland, indicating that further toxic chemicals would rain down on Perthshire and Tayside.
- (5) Microscopic particles discharged from a chimney to the atmosphere can be attracted to moist air to then fall as tiny droplets of moisture on our rivers, lochs and farms, poisoning our fish, animals, fruit, vegetables and the very air we breathe. This would create serious health and environmental problems, even on summer days.
- (6) The proposed location of the chimney in a valley surrounded by hills is not the solution, but conversely will create further health hazards for our already over-stretched health authorities. The chimney itself may house several circular flue tubes. This plant is alien to the area and not in line with the Scottish Executive Strategy for the mitigation of climate change.

Incidentally the American Government are at last taking action to limit carbon emissions.

(7) No doubt Energy Waste Plant Operators will attempt to restrict toxic waste emissions by fitting the minimum dust collection plants necessary to meet local requirements. These specifications should be set by insisting on higher efficiency ratings of over 99% for fume or dust particle emissions from the chimney.

NB. The energy waste plant owners are not the specialists for designing fume or dust collection plants. It is therefore incumbent for the authorities to lay down and specify stringent conditions to ensure compliance with a tightly controlled specification.

(8) No information apparently has been given for independent chemists such as SEPA to check gas flow emissions at the necessary sampling points for this proposed EfW plant. Strict daily maintenance is essential for these plants, and records must be kept for regular inspection.

(9) The local authority have not provided information regarding the necessary restrictions and responsibilities to be placed on the plant operator to ensure toxic waste gases never escape, or else plants could be closed.

(10) One relevant potential hazard is that, in the event of a fire, chemicals could escape and thus pollute the river. The Grundon Company have had a serious fire out-break at Grundon's Knowl Hill incinerator near Maidenhead, where eight fire engines attended the conflagration. An investigation by the Environment Agency is on-going regarding this fire which has led to a serious health risk emanating from this plant.

(11) The chemicals used in the plant to treat waste could accidentally be discharged and washed into the River Tay, poisoning sea trout, salmon, and other fish species attempting to return and spawn in the various tributaries feeding into the river.

(12) The incinerator only qualifies as a gas cleaning unit if it renders the dispersed material innocuous. Complete combustion of hydrocarbons yield H₂O and also CO₂, the discharge of which however, despite being non-odorous and non-toxic, is now known to seriously affect our climate. Stricter controls must be enforced. The proposals being put forward by Grundon Waste Management must be carefully scrutinised. Incomplete combustion may yield products that are more offensive than the original materials.

(13) The proposed building of this waste incinerator in the Perth and Tay valley is alien to the local harbour area and would be a monumental environmental disaster for Perthshire and for Scotland.

(14) Lack of transparency and understanding on the part of the local authorities does not inspire public confidence, especially when planning approval moves a step closer for a waste plant to be built at Binn Farm, near Glenfarg, as this will create a further potential health risk. The operators of the Binn Farm waste disposal plant will have no knowledge of the toxic chemicals to be incinerated at high temperatures, adding to the discharge of poisonous chemicals throughout Perthshire and Tayside.

Recall the three new slogans, currently being promoted by our Scottish National Party, are as follows:


(A) ----- A Safer Scotland !

(B) ----- A Smarter Scotland !

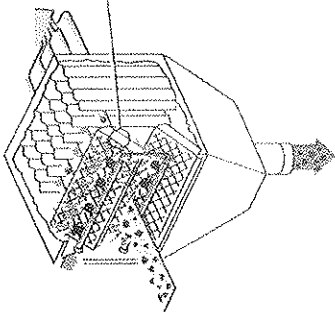
(C) ----- A Healthier Scotland !

Perth has until now been known to care for the well-being of its citizens, and for its many tourist attractions. Surely we want to encourage people to live here and visit our city, not drive them away by installing a waste incineration plant which is not in keeping with the city and will certainly be detrimental to the health of all.

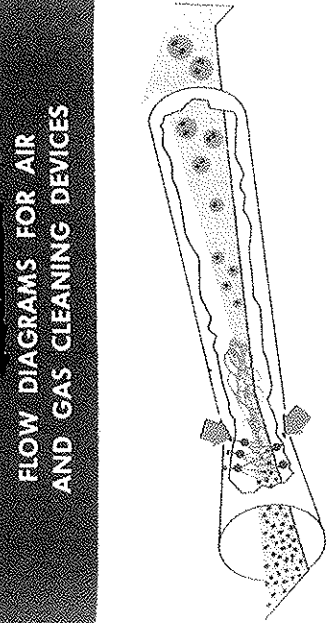
Yours sincerely



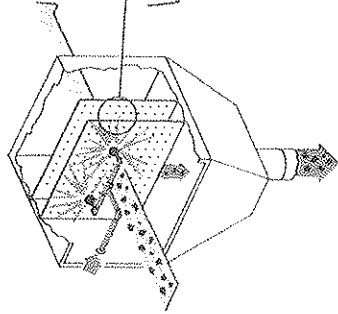
**FLOW DIAGRAMS FOR AIR
AND GAS CLEANING DEVICES**



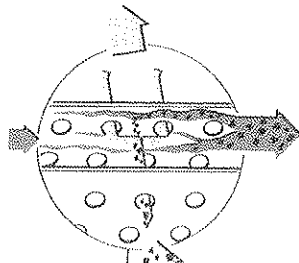
Wet Cell Air Washer



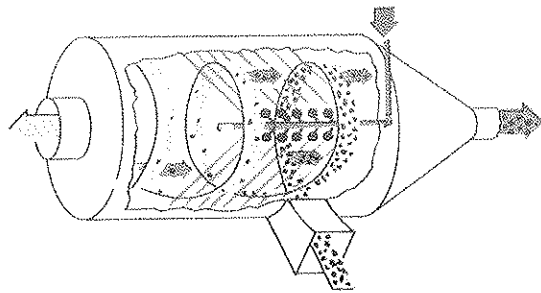
Venturi Scrubber



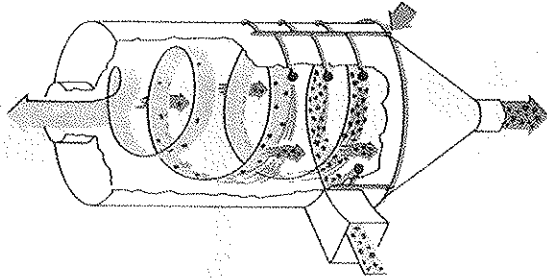
Impingement Scrubber



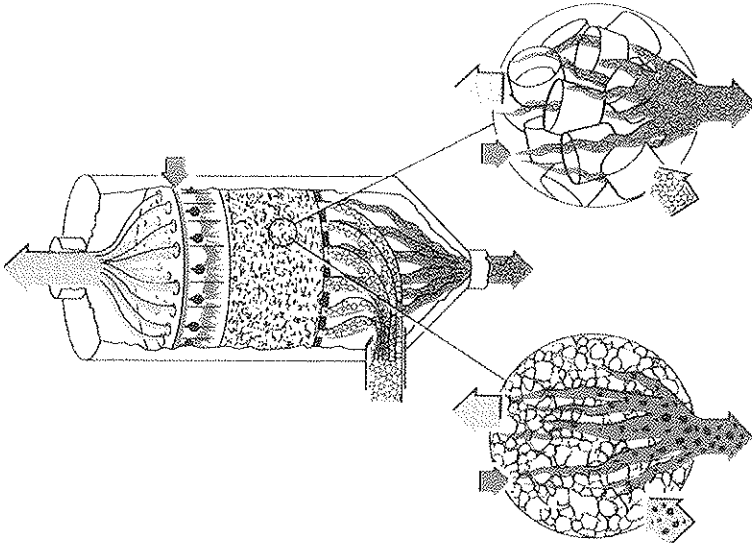
Cyclone Scrubber



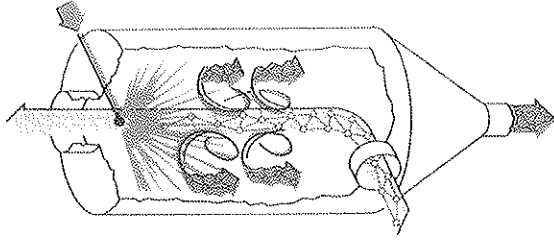
Fog Scrubber



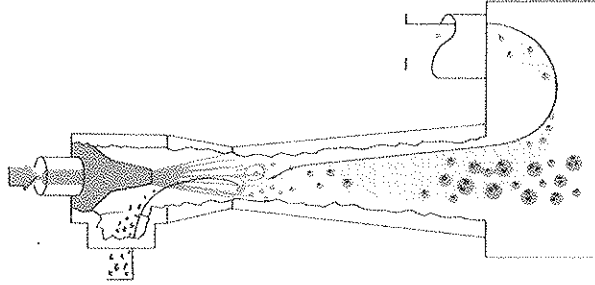
Pebble Bed Scrubber



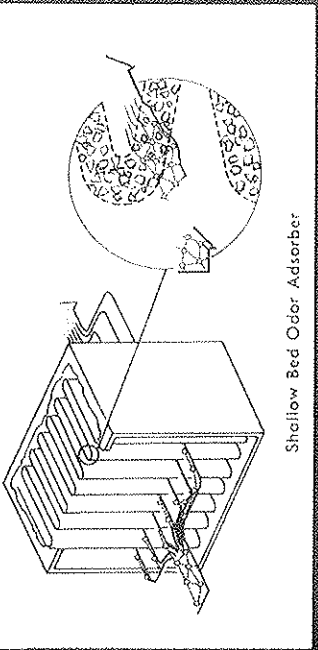
Packed Column Gas Absorber



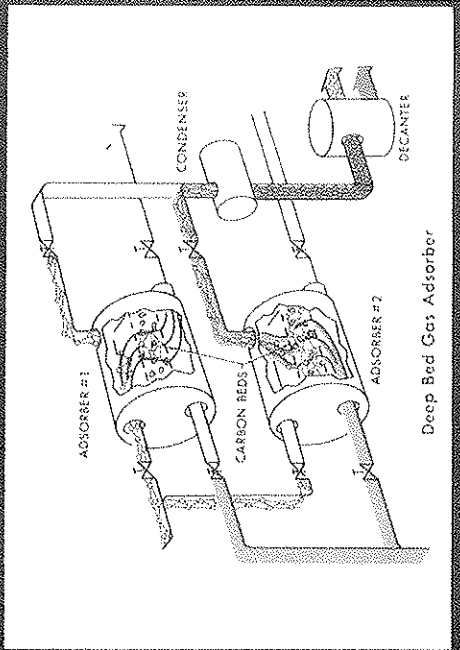
Spray Tower Gas Absorber



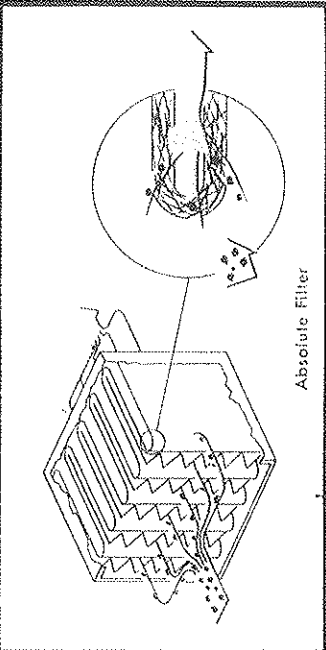
Jet Scrubber



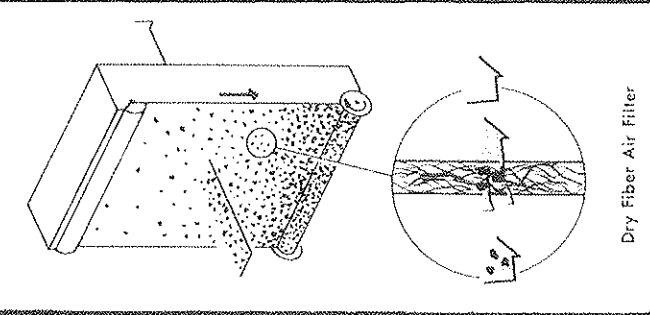
Shallow Bed Odor Adsorber



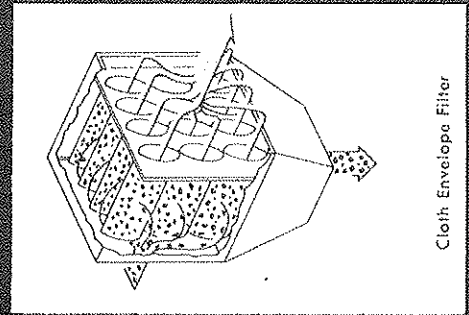
Deep Bed Gas Adsorber



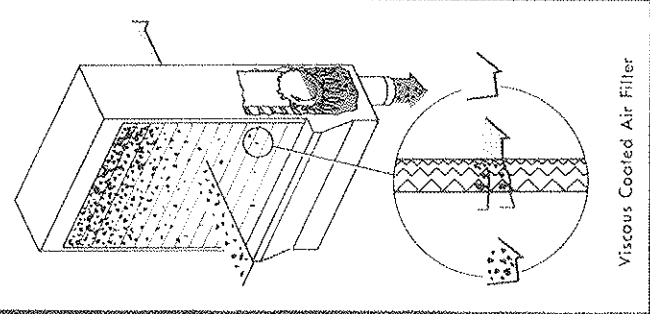
Absolute Filter



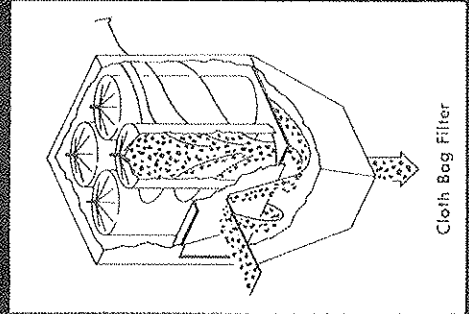
Dry Fiber Air Filter



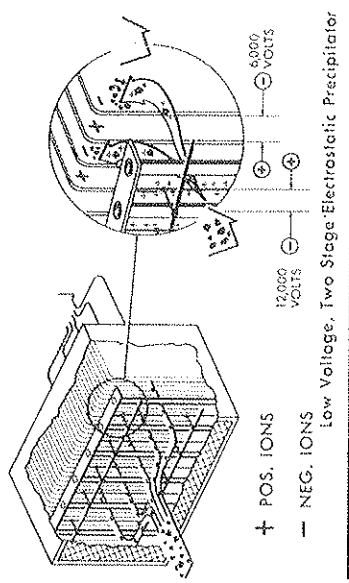
Cloth Envelope Filter



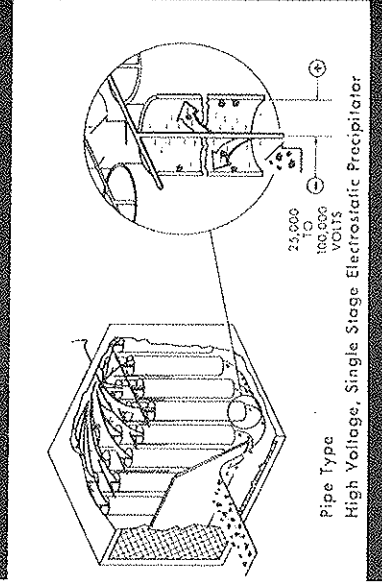
Viscous Coated Air Filter



Cloth Bag Filter



+ POS. IONS
 - NEG. IONS
 Low Voltage, Two Stage Electrostatic Precipitator



Pipe Type
 High Voltage, Single Stage Electrostatic Precipitator

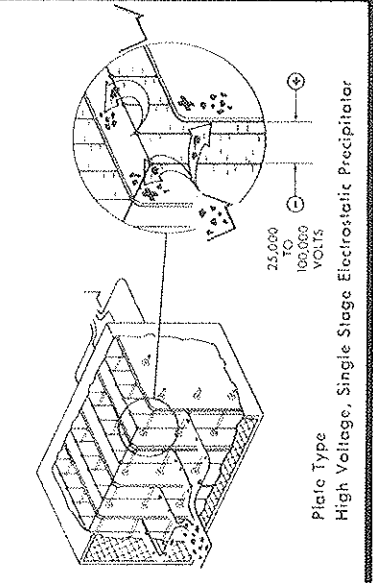


Plate Type
 High Voltage, Single Stage Electrostatic Precipitator