

DELEGATION: Burke Mountain Naturalists

Question

The Plasco plant in Ottawa is 3 kms away from the nearest residential area; there should be no dispute about this. 3 kms is 300 times the distance that the Plasco plant will be from residential areas in Port Moody. The plant is too close for comfort in Port Moody.

Plasco's Response

We have reviewed this question, which we also received during the first EPC meeting, and in fact the nearest residential development to our existing pilot plant in Ottawa is approximately 3kms away. The site that has been proposed by the City of Los Angeles for a waste conversion facility, that we are also currently in discussions to develop, would be approximately 300 meters from the nearest residential development and 150 meters from a nearby golf course.

That being said, Plasco recognizes that success means being a good neighbour and our facilities are designed to fit seamlessly and effortlessly into the community's landscape. Plasco facilities are also designed to be quiet and odour free, allowing our facilities to be close to communities without any issues. Plasco will continue to work with the City of Port Moody on gathering data, completing studies, assessing the suitability of the site, and tailoring the proposed facility to meet the needs of the community.

Question

Agrees that they are fully transparent, publishing information on their website. But, if you read the permits issued by the government of Ontario, they actually require all that information. So I doubt they are doing that willingly. They're simply doing it to meet the conditions of the permit. We don't know if we'd get similar conditions here as laws in BC are quite lax.

Plasco's Response

Public disclosure is a part of Plasco's corporate ethic. Plasco firmly believes that disclosing information to the public is a key part of being a good neighbour and a good corporate citizen. Plasco commits to the same level of disclosure – including publishing all emissions data on a public website and the formation of a Public Advisory Committee – for all Plasco facilities, including the one proposed for Port Moody.

Question

A claim was made that the dioxin levels were very safe. There is no safe limit of dioxins. They are the most toxic compounds and we don't want them released into our air. There was a comment that the amount released would be equivalent to what you would find in burning wood - which is a myth perpetuated by the chemical industry. You wouldn't find dioxins in wood that was found in the 17th Century. All the dioxins in the environment have been created by our manufacturing processes. The wood used now has usually been treated with pesticides residue and that's why they have dioxins in them. The dioxins released at the Plasco site will be those generated from the gasification process. It's morally wrong to release dioxins into the atmosphere when there are other alternatives for dealing with our waste.

Plasco's Response

When evaluating any environmental parameter, it is important to look at not only what is being proposed, but also at what is happening today. The Plasco facility is not adding new capacity, but displacing other alternatives for managing waste. Waste that is normally going to a landfill would go to a Plasco facility instead, and the effects of having that waste in landfill are eliminated. It is important to note that dioxins and furans are formed even in landfill systems, and the concentrations can be quite high. The table appended shows a summary of dioxin/furan emissions from combustion equipment used at landfills, based on a review of data from the United States, Canada, and Europe. In British Columbia, the emissions limit for dioxins and furans is 500 pg/m³. In Ontario, it's much lower at 80 pg/m³. When we built Trail Road, we were committed to environmental excellence and we agreed with the Ministry of Environment to go as low as can be measured, which was 40 pg/m³ at the time. Burning clean wood can produce concentrations above 20 pg/m³. That is below the level that used to be considered reliable for state of the art instruments only a few months ago. We are determined that our process will not create these compounds. So we have pushed to find the most sensitive tests with the most modern ability to detect reliably very minute quantities, down to 10 pg/m³, to be sure that no dioxins or furans are produced by our technology.

Environment Canada considers the lowest measure of quantification – the lowest concentration that can be accurately measured – to be 32 pg/m³. Our target remains no dioxins and furans, and we will continue to drive environmental excellence. The Plasco technology is designed so that at no time do the conditions exist that must be present for dioxins or furans to form. But we will also be adding to each commercial system a level of redundant assurance that would remove any of these compounds should they occur in a breakdown. Plasco is also investigating a continuous sampling system for dioxins and furans. Be clear, we will take whatever steps are required to scrutinize our exhaust, publish the results and add “belt and suspenders” backup filtering systems to ensure that performance.

Question

The Plasco Plant in Port Moody will be allowed to store 4-5 more times the amount than the Ottawa Plant. – The Ottawa plant is allowed to store 300tons of domestic waste, 100tons high carbon waste (which could include shredded tires), 100tons slag waste, 25 tons wet sulphur waste (which would have a rotten egg odour), 800kg fly ash from bag house, 300tons bottom ash waste, 8tons of waste from the main bag house ash, 3 drums of hazardous materials, 159 000L of liquid industrial waste above ground, 15 000L same waste underground. Multiply that by 5 and that is what they are proposing to put 100 meters from our houses. Not acceptable

Plasco's Response

There is no bottom ash from the process. A 400 tpd plant has the following characteristics:

- 400 tpd of waste diverted from landfill and converted to products
- 60 tpd of aggregate which will be sold for construction applications
- 2 tpd of biologically produced sulphur which has agricultural applications
- 120,000 L/d of water, recovered from the moisture in the waste, treated to potable quality standards
- 520 kg per day of heavy metals and carbon screenings which would have otherwise been left to leach in a landfill, but is segregated for disposal at an appropriate facility.

Question

This plant is not emission free, that's not true. At the Ottawa Plant, waste is ground up, and then processed which creates the syngas, which contains hydrogen, carbon monoxide and a lot of smaller contaminants, such as tars, heavy metals, and particulates. It's first scrubbed out by spraying water on it. Then passed through a carbon filter and then goes into a bag house, goes through a scrubber for hydrochloric acid and goes through another carbon bed filter, none of which is very high tech, and then it goes into either an enclosed flare or the power plant. This is the syngas and all the other stuff that is in it. For a plant that doesn't have any air emissions it sure has an awful lot of stacks. The plant is permitted to have 2 flares that are 0.9m in diameter. And then for the power plant for the 6 reciprocating engines, each of them a stack, so that's 6 stacks which are 0.25 meter in diameter. They release air which is 515 degree centigrade. Which is an air emission I would think? That was on their original permit that was approved in 2006. In December, they were given approval for another flare - 2.6m in diameter. They're not allowed to run all these flares at the same time. But these are all air emissions. It's nonsense to claim this plant is emission free. They also have a stack that's part of the cooling tower which is 3m in diameter. That's about 10 flares or 10 stacks for this 75ton a day plant. How many are we going to get for the 400 ton a day plant? Ottawa's site is relatively flat. So stacks aren't high. But where they're proposing to put the Plasco plant in Port Moody is in a depression, surrounded by steep hillsides and at top of the hillsides are houses. So the hot gases go up and float into yards where children are playing and into our windows. The flares are going to need to be built a little higher than the houses. So what kind of a plant is that going to look like? We don't want all those stacks and air emissions. Sight is not appropriate.

Plasco's Response

There are no emissions from a Plasco facility in the conversion of waste into the synthetic fuel gas. Emissions come from the creation of electricity from that fuel. The fuel gas is cleaned to remove any acid gases, metals, and particulates prior to being used in the gas engines.

Plasco Energy Group uses GE Jenbacher engines with the best emission performance levels available in the world. Please see attached for the emission chart that have been included in the Port Moody proposal.

The flare stacks are not used in steady state operation, but are used during start ups and shut downs only. It is important to note that the tallest piece of equipment at the Plasco Trail Road facility in Ottawa is the H2S scrubber (a completely enclosed column) which has a height of 16 m. This is approximately one-quarter of the size of the Burnaby Incinerator stack which is 60 m. Our tallest piece of equipment doesn't have emissions!

Question

The site is all habitat for wildlife. It used to have swallows, there are frogs that breed there and hundreds of salmon that no longer can get to the site that used to be there. There are species at risk that may be there including the Pacific Water Shrew. It would be wonderful to know if the Pacific Water Shrew has been able to persist at that site.

Plasco's Response

Plasco will continue to work with the City of Port Moody to gather data and carry out further studies as it continues to evaluate the appropriateness of the site and tailor the design to meet the needs of the community. This includes a study on species at risk.

Question

There was an NRC sponsored conference called the Straight Goods on Gasification in Winnipeg in 2004. A few points were made at the conference such as:

- 1) Gasifiers require dry fuel, less than 20% moisture. We know that it rains a lot here and that is not what our waste looks like so I think that is going to create a lot of issues for Plasco.
- 2) Tars that are formed in syngas are very problematic. Simple scrubbing like Plasco is proposing has failed to remove them and caused large environmental problems because of the tarry water that is produced. That doesn't sound like anything I would want to drink or deposit into a salmon bearing habitat. So I think we need a lot more answers before making any decisions.

Plasco's Response

The Plasco process is not a gasification process, but a conversion process in which gasification is only one of several elements. Crude syngas from the conversion chamber which contains tars pass through the refining chamber where plasma is used to refine the syngas and crack any tars, converting them instead to carbon monoxide. Waste from Ottawa has been found to have moisture content as high as 40%, and Plasco is well aware of variations in waste from city to city and season to season. The process is designed to handle a highly variable feedstock and generate a very consistent synthetic fuel gas. In 2004, the Plasco Trail Road facility had not yet been constructed, and it is important to recognize that since 2004, technology has advanced significantly.

Question

There is also a Website – with a report published by the Canadian Institute for Environmental Law. It is more about incineration, but it is important to realize that as far as groups like the EPA in the US are concerned processes like gasification and incineration are the same. The report is from a lifecycle analysis that shows it is more energy efficient to be increasing recycling programs and not doing things like incinerating.

Life Cycle Analysis

Plasco fully supports recycling programs and discourages incineration. When considering the best solution from a life cycle analysis perspective, it is important to compare alternatives in parallel. For post-recycled waste that is currently being generated, the options are disposal in a landfill, disposal by incineration, or conversion to products through a Plasco facility. From a life cycle perspective, recovery of value through a Plasco system is the best environmental solution.

DELEGATION: Local Resident

Question

I am concerned about finding ways to mitigate climate change throughout our forests. What is the impact of a Plasco facility in regards to the potential for increased production of carbon dioxide emissions?

Plasco's Response

The negative impacts of CO₂ emissions are not from the CO₂ itself, but from its global warming effects. If we dump our waste in landfills, methane – which is a severely harmful greenhouse gas that is 23 times worse than CO₂ - is released and the impacts are not confined to the landfill area, but are global. Similarly, if we are using power generated from fossil fuel powered stations, the impact is global. BC has been a net importer of power to meet the demands of a growing population and the BC government has recently stated 2016 as a target for being completely self-sufficient. A Plasco facility reduces greenhouse gases by preventing methane emissions and by displacing more greenhouse gas intensive sources of power, whether that power is imported into BC or generated elsewhere in BC or generated locally. Global warming is indiscriminate in its impacts; particularly in the case of greenhouse gases. Moving waste or power facilities to other locations does not mitigate global warming effects locally.

Question

I want to know more in regards to the recovery of heavy metals and how it compares to other procedures out there in terms of managing waste?

Plasco's Response

Heavy metals in waste arise from consumer products like batteries and light bulbs that contain elements like cadmium and mercury. When waste is sent to landfill, these metals are also in the landfill and have the potential to leach and impact the surrounding soil, waterways, and aquifers. Mercury which is volatile is also present in landfill gas. In the Plasco Conversion System, these heavy metals are segregated from the residual waste and sent to an appropriate disposal facility – as they should have been in the first place.

DELEGATION: Local Resident of Couquitlam - On city council for 9 years

Question

It doesn't matter how many incinerators we build or how many garbage dumps we have - you build it and they will come. It is possible to achieve a very large degree of recycling and retrieval of waste. We should think about this - apparently this company estimates that 400 tonnes of garbage will be taken care of by this facility - over \$27000 a day. It's only going to take about 10% of the stream. We've got another 90%. This is a huge public cost. We need to do away with garbage dumps and incinerators.

Plasco's Response

Plasco encourages all recycling programs. We will take what is left over to complete your recycling and recovery goals. The 400 tpd that comes to a Plasco facility means 400 tpd less that needs to go into local landfills or incinerators where greenhouse gas and other emissions are generated. Our business model is to build, own, operate and finance. We will assume all the financial risk and all the operating risk. There is no capital cost to the taxpayer. Additionally our environmental performance is guaranteed.

Question

There should be cooperation of all levels of government and corporations. There really should be a public hearing for this facility so everyone knows what is intended should this go ahead. You need to be consulting with all Tri-cities municipalities.

Plasco's Response

Although not normally done, as part of its commitment to transparency, we have agreed with the City to conduct our preliminary review of the project in a public forum. The City is in the beginning phases of assessing whether the Plasco Solution is the right one for Port Moody. There is no secret deal or hidden agenda.

It is important to be aware however that we are only at a preliminary stage of our investigation. There are 5 distinct phases to the implementation of a Plasco Solution in Port Moody:

Phase 1: Preliminary Investigation

- Review the known information about the site and make a preliminary determination as to whether a Plasco Facility could be built on the site.
- Determine the criteria required to evaluate the project in detail.
- Identify the concerns and issues (appropriate environmental and logistical studies) that would have to be addressed for the project to proceed.
- Gauge the level of support in the community for this project

Phase 2: Detailed Investigation

- Definitive Agreement signed with City of Port Moody
- Carry out detailed investigations
- Engage with BC Hydro to negotiate a Power Purchase Agreement
- Engage with Metro Vancouver to determine appropriate supply of Post Diversion Waste

Phase 3: Permitting and Public Consultation Steps

Phase 4: Project Construction

Phase 5: Project Operation

DELEGATION: Anmore Resident & member of Anmore Environment Committee and sufferer from multiple chemical sensitivity

Question

Anmore was not consulted about the environmental impact and I believe there would be a neighbourhood impact. 3-8% of Canadians have multiple chemical sensitivity. Will syngas be, yet another product for me to be sensitive too?

Plasco's Response

The syngas is created from the waste without any emissions, and is then used as fuel in the engines. Exposure to syngas is therefore not an issue.

Question

If this facility won't operate, if it doesn't meet the new low standards, does it mean it won't be running at all if the waste we provide is more toxic than you expect? And don't the emissions depend on the waste when all these cans of chemicals and paint and things we are not expecting people to throw away but they do end up in the garbage and into the incinerators? Where does the waste go - does it pile up, does it go back into the trucks?

Plasco's Response

When Plasco designs its facilities, it designs it with large safety margins. For example, if waste was expected to have batteries in it due to improper disposal by the public of batteries, Plasco does not use the expected number of batteries during the design, but uses instead a much larger number. By designing conservatively in this way, even if the public's management of waste is much poorer than expected, Plasco can ensure excellent environmental performance.

DELEGATION: Local Resident - Past member of the EPC

Question

I have been conducting biological studies in this province since 1970. At 240tons of carbon dioxide a day, equivalent to 2800 cars idling, 24hrs a day, 365 days a year at that location. That's equivalent to 400 000 no car idling by-law violations per day. That's equivalent to 38 000 cars commuting from my house to downtown every day and if Plasco was to [be tested on automobile standards for] air care it would pass on carbon monoxide and fail on NOx - interesting definition of zero emissions. It's not a zero emission plant.

Plasco's Response

When assessing the impact of the proposed facility, it's important to consider the proposed facility in the context of what is happening today. Post-recycled waste needs to be managed and the current alternatives are incineration or landfill. If that waste is sent to landfill or incineration, the amount of carbon monoxide (CO) and nitrogen oxides (NOx) that will be released will be more than if that waste was sent to a Plasco facility. This waste is already generating emissions. By diverting it from a landfill there is a net reduction in CO and NOx emissions because Plasco facilities have better environmental attributes than landfills or incinerators.

The greenhouse gas benefits of using a Plasco facility are enormous. Sending waste to a landfill generates methane, a harmful greenhouse gas that has a global warming potential 23 times that of carbon dioxide. Diverting waste from a landfill to a Plasco facility means that those methane emissions are eliminated. Additionally, the amount of power that is generated directly replaces power from other greenhouse gas intensive sources.

Question

You say it's local. Well 400 tonnes a day is not local. It's 40 times local.

Plasco's Response

Plasco believes that environmental stewardship is everyone's responsibility. We all have a responsibility to manage our resources and manage our impacts as close to the source as possible. This facility is sized appropriately to deal with waste from Port Moody and the neighbouring municipalities. It is less than half the current volume that the Coquitlam transfer station currently receives.

Question

You say because there is no emission coming out of the pipe, upstream of the exhaust, there are no emissions. That is not the case.

Plasco's Response

There are no emissions from a Plasco facility in the conversion of waste into the synthetic fuel gas. Emissions come from the creation of electricity from the fuel. The fuel gas is cleaned to remove any acid gases, metals, and particulates prior to being used in the gas engines and the emissions from the engines are better than the most stringent regulations in the world (refer to the appended table).

Question

You offer us a guarantee. That guarantee is conditional to us agreeing to become the canary in the coal mine. And you may have a consultant that says carbon monoxide is benign but it is not. Canaries are in coal mines to detect that gas precisely.

Plasco's Response

It's important to understand the difference between carbon monoxide (CO) and carbon dioxide (CO₂). We have said that the health impacts of carbon dioxide are not due to the carbon dioxide itself, but due its influence as a greenhouse gas in contributing to global warming impacts. A Plasco facility reduces greenhouse gases by reducing methane (23 times worse than carbon dioxide) from landfills and by displacing more greenhouse gas intensive sources of power. In the case of carbon monoxide, Plasco designs its facilities so that any trace amounts of carbon monoxide that is present in the exhaust of the engines is treated. In fact, the amount of carbon monoxide that is released from one tonne of waste processed by the Plasco system is less than the amount of carbon monoxide that is released from one tonne of waste that is sent to a landfill with a landfill gas capture and power generation system. From both a carbon monoxide and a greenhouse gas perspective, a Plasco facility is better than sending waste to landfill or incineration.

Question

I believe that when one untruth is uncovered, others are there to be found. The claims include no odours, and creating energy from waste. Energy can be returned but at a cost of more energy. Both of those claims were made by the people that presented the argument for the incinerator that is in Burnaby. Both have found to be false. If anything goes wrong at the plant, it will affect all of us.

Plasco's Response

Plasco fully finances and operates its facilities so that there is no capital expenditure required for the municipality. The majority of Plasco's revenues are from power sales, and of the electricity it produces, approximately 20-25% is used in the process and 75-80% is exported to the grid. Beyond this, Plasco also guarantees its environmental performance such that if it fails to meet the environmental criteria (which will be more stringent than existing regulations), it will remove the plant and return the land to its pre-construction state.

DELEGATION: Local Resident

Question

You have wastewater and you truck this to a wastewater facility in Ottawa. How much water are we talking about and how is it transported and how many trucks and cost?

Plasco's Response

Plasco fully finances and operates its facilities and is responsible for all costs. Plasco recently finished the detailed design of its on-site wastewater treatment plant for the Trail Road facility. The first phase of the on-site water treatment facility will be commissioned this fall. The final arrangement for Trail Road (and the final design for commercial facilities) treats water to potable quality standards. This recovered water can then be recycled for flush water, irrigation, or any other suitable application.

DELEGATION: Local Resident

Question

We really should recycle everything we can recycle, but there is a certain amount we just can't recycle and that has to be somehow disposed of. I think the technology that Plasco is advocating is okay, but is this a proper location for it? It should be in an abandoned quarry way out where there is low environmental impact, no people around for 5-10km.

Plasco's Response

Plasco recognizes that success means being a good neighbour and our facilities are designed to fit seamlessly and effortlessly into the community's landscape. Plasco facilities are also designed to be quiet and odour free, allowing our facilities to be close to communities without any issues. Plasco will continue to work with the City of Port Moody on gathering data, completing studies, assessing the suitability of the site, and tailoring the proposed facility to meet the needs of the community.

Question

Don't have any really proof or statistics about how much emissions there really is. It needs to be proven that there is no emission.

Plasco's Response

There are no emissions from the conversion of waste to fuel gas. Prior to being used in the gas engines, the fuel gas is cleaned of any acid components, particulates, and metals and the emissions from the exhaust of the engines is designed to meet the most stringent regulations in the world. Plasco facilities are designed in modules and use the same engines so that the performance from module to module is the same. Plasco currently has Continuous Emissions Monitoring Systems (CEMS) installed at the Trail Road facility and reports all emissions on a public website. Plasco will continue to work with the City of Port Moody to gather data and to complete studies specific for the site in Port Moody.

Question

If there is very high energy through containers, these can be cracked and then these effluents can go into the soil/water. We can't have this so near Burrard inlet. This probably is actually a good technology, but the plant should be placed further away from a populated area.

Plasco's Response

Plasco is committed to superior environmental performance, regardless of any variability in feedstock. There is no contamination of land or water with the Plasco Conversion System and hence no runoff. In fact, the moisture in the waste is recovered and treated to potable quality standards and is suitable for irrigation or recharging an aquifer. By diverting more than 99% of waste from landfill, a Plasco facilities prevents leaching and contamination of soil and water that may otherwise occur in a landfill.

The air emissions will better the toughest regulatory limits that exist in British Columbia. These limits are set by the regulatory bodies in assessing what is permissible for all life, including birds, mammals, and marine life. Metro Vancouver has established ambient air quality objectives which minimize the risk to health and to the environment. Monitoring of air quality at different locations allows Metro Vancouver to compare concentrations of various components with air quality objectives, and Plasco will have to analyze any impacts on ambient air quality prior to obtaining permits. Plasco will continue to work with the City of Port Moody to gather data, complete studies, assess the suitability of the site, and tailor the design to the needs of the local community.

DELEGATION: Local Resident

Question

Has the taskforce heard from Metro Vancouver about possible air quality impacts on our air shed? Because of Port Moody's history with air quality we need to have a presentation about our air quality now, maybe what it was before and what the possibility would be of another plant that does emit.

Plasco's Response

The Plasco Conversion System ensures maximum environmental protection. In designing the System, Plasco reviewed environmental regulations from around the world. The best available control technologies for emissions control have been used to ensure that even before the synthetic fuel gas is fed to the gas engines; the most stringent environmental regulations have been met (refer to appended table).

The emissions from processing each tonne of waste for parameters like NO_x, CO, and SO₂ is less than the emissions from landfilling a tonne of waste and capturing landfill gas for power generation. Because of Plasco's superior environmental performance, by diverting waste from landfill, a Plasco facility also reduces the amount of NO_x, CO, and SO₂, that would otherwise be generated.

Under provincial legislation, the responsibility for monitoring regional air quality falls to Metro Vancouver. As such, Metro Vancouver is responsible for controlling industrial, commercial and some residential emissions and maintaining emissions inventories. Metro Vancouver uses permits and regulations to manage major sources of emissions from business and industrial sources, and thus controls impacts to the Lower Fraser Valley air shed. Monitoring, permitting, regulating and enforcing emissions limits all fall under Metro Vancouver's responsibilities.

More specifically, the Metro Vancouver Air Quality Management Plan seeks to minimize the risk to public health from air pollution, to improve visibility, and to minimize Metro Vancouver's contribution to global climate change. To this end, Metro Vancouver has established Ambient Air Quality Objectives for particulates, NOx, CO, SO2 and ozone. Prior to construction of the Port Moody facility, detailed dispersion modeling will be completed to assess the impact on ambient air quality. The dispersion model that will be employed will be one that is approved by Metro Vancouver authorities.

DELEGATION: Local Resident

Question

Where the proposed electrical grid is? Would the grid be a one-circuit? And I'm trying to understand the size of it.

Plasco's Response

The specifics of connections to the grid will be discussed with BC Hydro.

Dioxin/furan emissions summary for combustion equipment with greater than three tests, and detected values (concentrations in pg I-TEQ/Nm³ @ 11% O₂)

Combustion Equipment	No. of Units/Facilities	No. of Tests	Concentration Range (Mean – Std Dev.)
Flare (shrouded)	11	35	0.22 to 156 (13.6-33.0)
I.C. Engine	16	36	0.04 to 318 (19.6-54.5)
Flare (afterburner)	3	6	0.28 to 6.67 (3.10 – 2.44)

Reference: Caponi, F.R., Weless, E., and Frediani, D. *Dioxin and Furan Emissions from Landfill Gas-Fired Combustion Units*. County Sanitation Districts of Los Angeles County.

Excellent Performance against the Toughest Regulations

Item	Units	California	EU	Ontario	British Columbia	Plasco Enforceable	Plasco Target
Particulate Matter	mg/m ³	17	9	12	20	9	3
Organic Matter	mg/m ³	-	9	50	40	9	9
Hydrogen chloride (HCl)	mg/m ³	27	9	20	70	9	2
Sulfur dioxide (SO ₂)	Mg/m ³	57	47	37	250	38	10
NO _x as NO ₂	Mg/m ³	205	186	211	350	13	9
Carbon monoxide (CO)	Mg/m ³	42	47	-	55	-	34
Mercury (Hg)	Mg/m ³	0.057	0.05	0.020	0.200	0.005	0.0005
Cadmium (Cd)	Mg/m ³	0.014	0.05	0.014	0.100	0.007	0.0009
Lead (Pb)	Mg/m ³	0.14	0.05	0.14	0.050	0.02	0.012
Dioxins and furans*	ng/m ³	9	1	0.041	0.5	0.01	ND

Note – Dry basis, 20°C, 101.3 kPa, 11% O₂

* Dioxins and furans regulatory limits are shown, but are not directly comparable across jurisdictions