Clean Air Amendment Bill 2024

(Clean Air Amendment Act 2024 &
Clean Air Amendment Regulations 2024)

Public Consultation

Presentation Summary

June 2024

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Pollution Control Section

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Background: Existing Processes

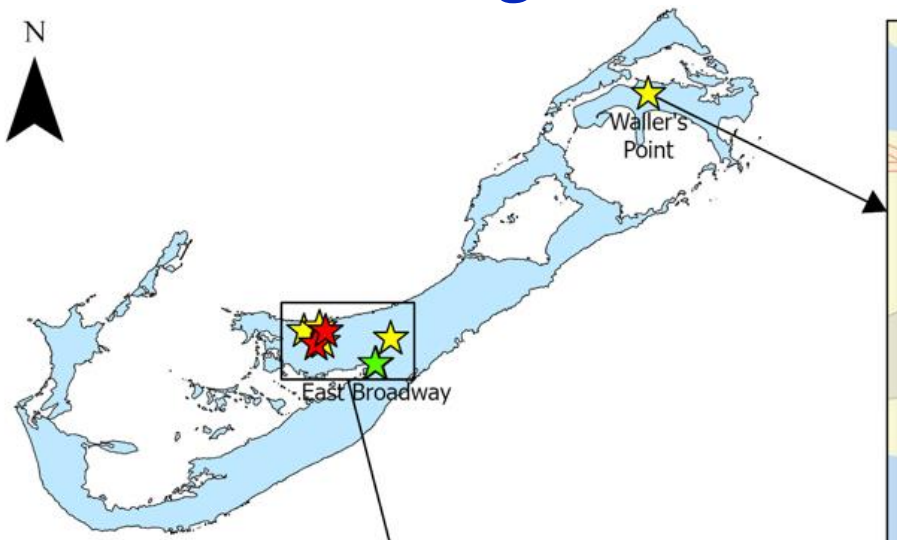
Clean Air Act 1991

- '*Controlled Plants*' are facilities that:
  - Generate electricity (BELCO, Backup Gensets), steam
  - Treat / dispose of sewage (Aerated treatment plants)
  - Incinerate (Tynes Bay, Mediwaste, Crematoria)
  - Store, treat, dispose of HAZMAT – incl. SOL/RUBIS.
  - Spray paint vehicles/machinery
  - Crush, process, transfer of stone, gravel or soil
  - Manufacture asphalt, concrete, cement, etc.
  - Generate compost
  - Dry Cleaners

Details at: https://www.gov.bm/online-services/apply-construction-permit-and-operating-licence

- Issued in 2023:
  - Construction Permits….53
  - Operating Licences…..825

Background: Existing Processes: Ambient Air Quality Monitoring



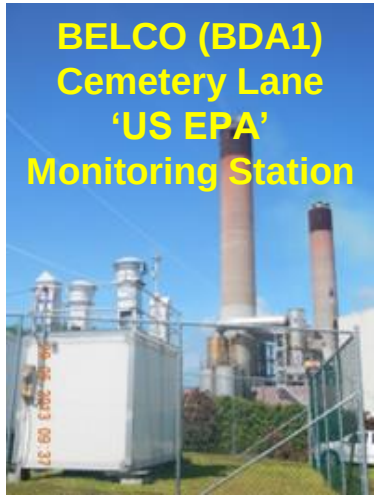
Air Quality Monitoring Station Locations

Type of Monitoring Station

- Indicative (Govt)
- US EPA (BELCO)
- US EPA (Govt)

- Six ‘Indicative’ monitoring stations managed by Govt.
- One ‘US EPA’ standard monitoring station managed by Govt (since 2023).
- The *Environmental Authority* requires BELCO to monitor ambient air to ‘US EPA’ standards at 2 locations with a third station ready to be deployed once an appropriate site becomes known to DENR.

Background: Existing Processes: Ambient Air Quality Monitoring



'US EPA' Monitoring Stations (x3).

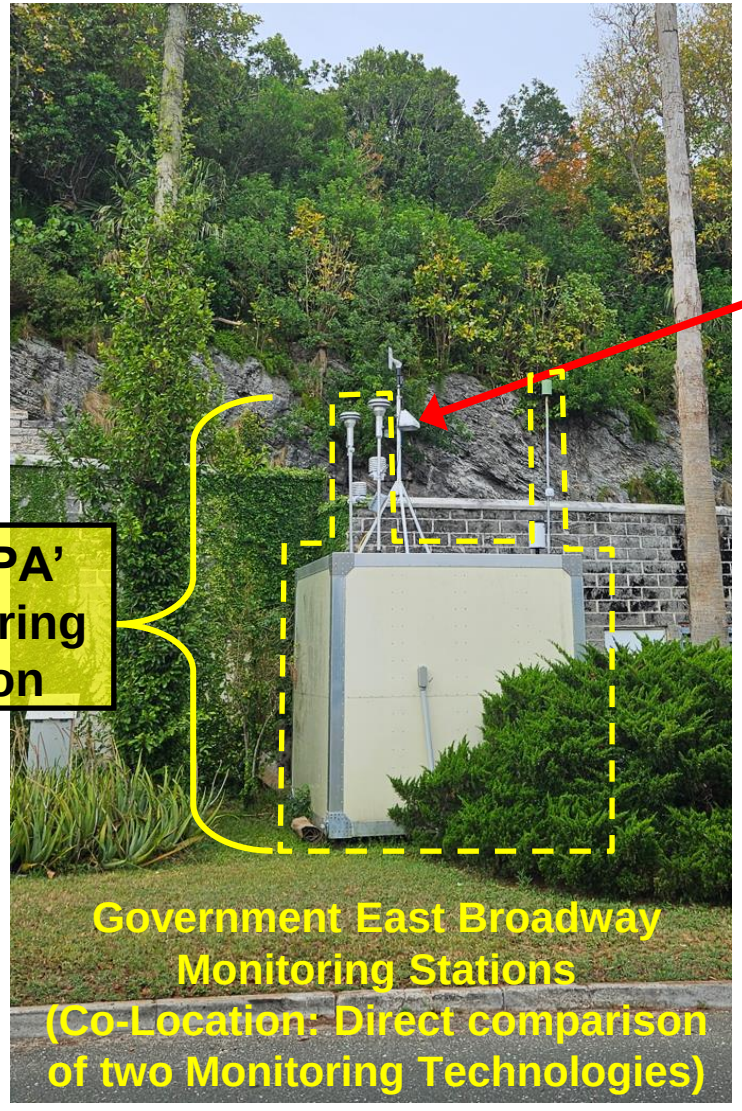
- Large, difficult to meet US EPA siting requirements.
- Resource-intensive.
- US EPA 'Reference' or 'Equivalent' Method

'Indicative' Monitoring Stations (x6)

- Easier to locate.
- Lower resource effort.
- 'Indicative' methodology.

East Broadway, Saltus School, Berkeley School, Whitney Ave, Prospect, Waller's Point Road - See Slide 4

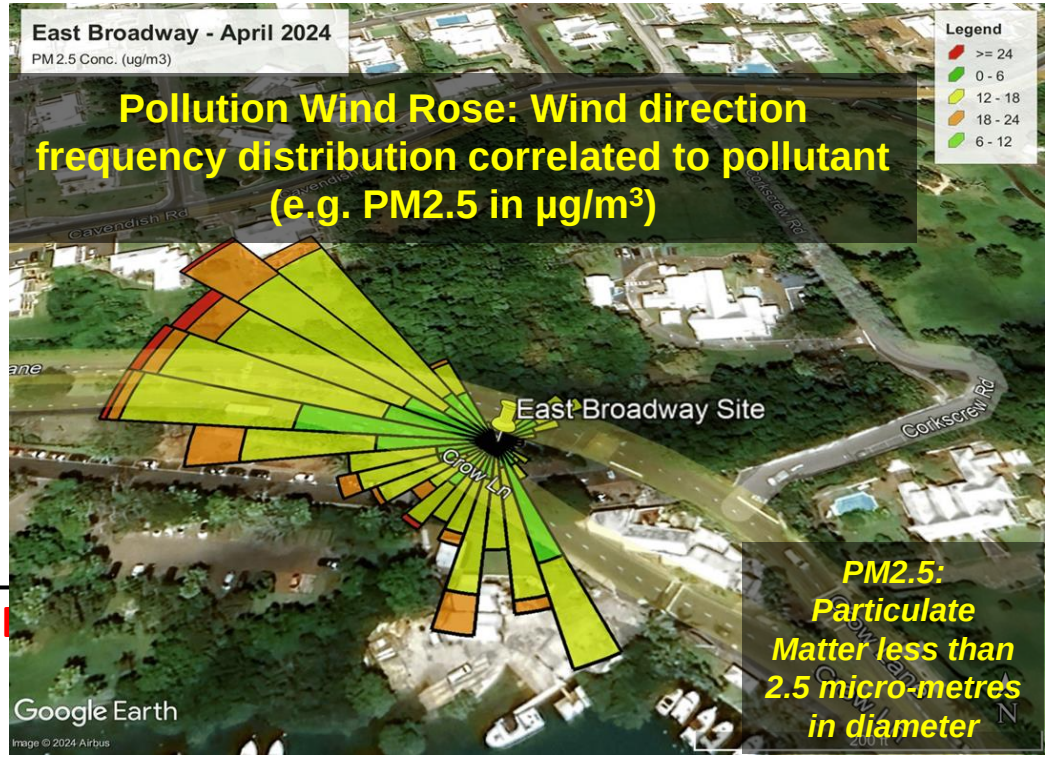
Background: Existing Processes: Ambient Air Quality Monitoring



'US EPA' Monitoring Station

Government East Broadway Monitoring Stations (Co-Location: Direct comparison of two Monitoring Technologies)

'Indicative' Monitoring Station



Background: Existing Processes - Clean Air Regulations 1993 (1/2)

- Air Quality data is provided annually to the Department of Statistics for the annual compendium and to the United Nations Environment Programme (UNEP).
- Note: Up to Mar. 2022 all monitoring stations were 'US EPA' standard, including one on Ocean Lane to detect downdrafted BELCO exhaust.
- Since Apr. 2023 'Indicative' monitoring stations managed by Government have been in the process of being set up and operated in addition to one 'US EPA' station at East Broadway.

Average Concentrations for Ambient Air Monitoring Sites, 2020 - 2022

Average Concentrations

	Pollutants	Units	Bermuda Limit (Clean Air Regulations 1993)	2020					2021						2022					
				Prospect	East Broadway	Cemetery Lane (BDA#1) (Belco-Operated ISO14001)	Langton Hill (BDA#2) (Belco-Operated ISO14001)	BIOS	Prospect	East Broadway	Cemetery Lane (BDA#1) (Belco-Operated ISO14001)	Langton Hill (BDA#2) (Belco-Operated ISO14001)	Ocean Lane (BDA#4) (Belco-Operated)	BIOS	Prospect **	East Broadway **	Cemetery Lane (BDA#1) (Belco-Operated ISO14001)	Langton Hill (BDA#2) (Belco-Operated ISO14001)	Ocean Lane ((Belco-Operated) (BDA#4) ***	BIOS **
Hourly	NO_2	$\mu g/m^3$	**400**	3.61	4.76	6.00	3.00	-	1.68	6.22	4.25	4.92	6.24	-	1.69	6.95	3.41	4.00	6.63	-
	SO_2	$\mu g/m^3$	**450**	1.43	-	2.40	2.40	-	1.99	0.88	0.92	2.59	11.08	-	3.16	0.49	2.32	11.17	10.05	-
	PM_{10}	$\mu g/m^3$	**-**	16.00	15.56	10.70	11.50	-	17.59	14.16	10.66	12.29	15.12	-	15.35	13.77	10.41	12.44	14.49	-
	$PM_{2.5}$	$\mu g/m^3$	**-**	4.90	12.09	-	-	-	3.78	14.40	-	-		-	3.67	13.81	-	-	-	-
	TSP	$\mu g/m^3$	**-**	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-
24-Hour	NO_2	$\mu g/m^3$	**200**	-	-	6.00	3.10	-	-	-	4.18	4.42	5.92	-	1.48	7.05	3.22	3.31	6.09	-
	SO_2	$\mu g/m^3$	**150**	-	-	2.40	2.50	-	-	-	0.90	9.28	10.65	-	3.31	0.35	2.32	6.94	10.04	-
	PM_{10}	$\mu g/m^3$	**50**	18.45	21.77	10.80	11.50	14.40	18.63	22.50	10.00	11.85	14.67	18.60	15.55	13.72	9.69	12.08	14.09	15.41
	$PM_{2.5}$	$\mu g/m^3$	**-**	-	-	-	-	-	-	-	-	-	-	-	3.00	13.93	-	-	-	-
	TSP	$\mu g/m^3$	**100**	-	-	16.10	16.80	-	-	-	-	-	-	-	-	-	-	-	-	-
1-year	NO_2	$\mu g/m^3$	**60**	3.60	4.80	6.00	3.01	-	1.40	6.20	4.25	4.92	6.24	-	1.69	6.95	3.41	4.00	6.63	-
	SO_2	$\mu g/m^3$	**30**	1.40	-	2.37	2.36	-	1.20	0.60	0.92	2.59	11.08	-	3.16	0.49	2.32	11.17	10.05	-
	PM_{10}	$\mu g/m^3$	**30**	13.40	13.60	10.75	11.50	16.60	17.60	14.10	10.66	12.29	15.12	18.60	15.35	13.77	10.41	12.44	14.49	15.41
	$PM_{2.5}$	$\mu g/m^3$	**-**	4.90	12.10	-	-	-	3.60	14.40	-	-	-	-	3.67	13.81	-	-	-	-
	TSP	$\mu g/m^3$	**60**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Background: Existing Processes - Clean Air Regulations 1993 (2/2)

- *Air Quality data for Bermuda submitted annually to the Dept of Statistics Compendium & UNEP*

Maximum Concentrations for Ambient Air Monitoring Sites, 2018 - 2022

Maximum Concentrations

	Pollutants		Bermuda Limit (Clean Air Regulations 1993)	2018					2019					2020					2021						2022					
				Prospect	East Broadway	Cemetery Lane (BDA#1) (Belco-Operated ISO14001)	Langton Hill (BDA#2) (Belco-Operated ISO14001)	BIOS	Prospect	East Broadway	Cemetery Lane (BDA#1) (Belco-Operated ISO14001)	Langton Hill (BDA#2) (Belco-Operated ISO14001)	BIOS	Prospect	East Broadway	Cemetery Lane (BDA#1) (Belco-Operated ISO14001)	Langton Hill (BDA#2) (Belco-Operated ISO14001)	BIOS	Prospect	East Broadway	Cemetery Lane (BDA#1) (Belco-Operated ISO14001)	Langton Hill (BDA#2) (Belco-Operated ISO14001)	Ocean Lane (BDA#4) (Belco-Operated)	BIOS	Prospect	East Broadway	Cemetery Lane (BDA#1) (Belco-Operated ISO14001)	Langton Hill (BDA#2) (Belco-Operated ISO14001)	Ocean Lane (BDA#4) (Belco-Operated)	BIOS
Hourly	NO_2	µg/m³	400	85.28	84.34	298.17	114.70	-	119.47	90.11	272.10	116.40	-	36.80	37.60	271.29	86.90	-	49.00	46.30	71.55	86.77	105.19	-	44.60	43.20	74.00	103.70	331.20	-
	SO_2	µg/m³	450	27.67	73.16	71.93	270.60	-	131.08	22.28	88.80	186.80	-	37.30	9.50	65.50	272.80	-	49.10	23.60	8.62	158.81	299.60	-	42.90	15.60	15.40	205.70	292.90	-
	PM_{10}	µg/m³	-	-	262.00	98.66	224.27	-	-	273.00	75.20	87.00	-	112.00	202.00	94.80	225.10	-	70.00	177.00	66.67	268.48	128.68	-	64.00	89.00	122.20	341.20	320.80	-
	$PM_{2.5}$	µg/m³	-	129.50	-	-	-	-	48.40	-	-	-	-	261.80	63.00	-	-	-	39.00	58.00	-	-	-	-	15.00	44.00	-	-	-	-
	TSP	µg/m³	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24-Hour	NO_2	µg/m³	200	65.28	43.21	95.07	34.67	-	84.95	49.51	110.60	50.70	-	-	-	91.90	55.40	-	-	-	22.48	52.06	69.01	-	16.80	20.65	23.30	37.40	69.20	-
	SO_2	µg/m³	150	7.89	27.89	25.20	50.32	-	17.69	5.19	33.20	73.40	-	-	-	30.20	130.20	-	-	-	2.44	74.00	123.05	-	16.41	5.46	7.10	73.20	96.80	-
	PM_{10}	µg/m³	50	62.70	87.00	75.70	38.30	85.50	53.10	48.30	47.00	43.80	52.30	44.24	46.40	40.70	41.50	46.40	46.90	47.50	43.85	46.56	46.19	57.70	31.57	38.74	37.30	40.90	32.70	29.80
	$PM_{2.5}$	µg/m³	-	24.00	-	-	-	-	24.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.67	23.87	-	-	-	-
	TSP	µg/m³	100	73.00	66.70	41.70	35.65	-	-	-	37.90	30.20	-	-	-	28.30	29.70	-	-	-	-	-	-	-	-	-	-	-	-	-
Total number of exceedances of the limits set in the Clean Air Regulations 1993 over each year				1	1	1	0	1	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0

Background: Existing Processes – *Clean Air Act 1991: Odour*

- Under the *Clean Air Act 1991* '*Air Pollution*' includes… '*any air contaminant causing an odour in contravention of any regulation regulating offensive odours*.'
- Section 11 of the Act states that the Minister may make regulations '*prescribing the methods and procedures for the control of… offensive odour…*', and
- Under Section 12 '*if it appears to an inspector that there is in the air an air contaminant that does not comply with a regulation regulating offensive odours the inspector may serve an emission control order*.'
- Note: Until this proposed *Amendment* Bermuda did not have Odour Regulations.
- Measuring odour is very subjective and despite significant improvements in sensor technology the human nose appears to be the best mechanism of sensing the various chemicals that comprise of an odour.
- Technologies, processes and statutes that are starting to emerge in some jurisdictions are based on dilution to threshold using odour-free gas where the threshold is determined using trained odour detection personnel.

Background: Existing Processes – *Refrigerant Handlers Permit*

- Bermuda is a signatory to the *Montreal Protocol 1987* and has requirements to manage emissions of refrigerant gases.
- Technicians who import or handle refrigerant gases for HVACs in buildings are required to be permitted by DENR. Each permit lasts 5-years.
- Details: *www.gov.bm/online-services/apply-refrigerant-handler-permit*
- Bermuda College provides training to HVAC technicians and determines if overseas certification is equivalent to standards applied in Bermuda (*i.e.* US EPA).
- DENR, MPW and Bermuda College provide presentations to technicians prior to permit renewal on new emerging refrigerant gases, health & safety, waste management, export and environmental concerns.
- Total Permitted Refrigerant Handlers: 199 (Feb 2024). Details are available at: *https://www.gov.bm/sites/default/files/2024-02/Publish-Feb-2024.pdf*.

Proposed Legislative Changes: Align Bermuda's 'Limit-Values' to UK Air Quality Objective 'Target-Values'. (1/3)

All Units: Micrograms per cubic metre (µg/m³).		Bermuda Clean Air Regs. 1993	UK Air Quality Standards Regs. 2010 ('Limit-Values')		UK Air Quality Objective 'Target-Values' 2010		Proposed Amendments to Bermuda Clean Air Regulations ('Limit-Values')	
Air Contaminant	**Period of monitoring**	**Concentration Limit**	**Concentration Limit**	Max. No. exceedances per year	**Concentration Target**	Max. No. exceedances per year	**Concentration Limit**	Max. No. exceedances per year
Sulphur Dioxide	15-minute	-	-	-	266	35	266	35
	1-hour	450	350	24	350	24	350	24
	24-hour	150	125	3	125	3	125	3
	1-year	30	-	-	20	annual mean	20	annual mean
Nitrogen Dioxide	1-hour	400	200	18	200	18	200	18
	24-hour	200	-	-	-	-	-	-
	1-year	60	40	annual mean	40	-	40 / 30 †	-
PM10	24-hour	50	50	35	50	35	50	35
	1 year	30	40	annual mean	40	annual mean	30	annual mean
PM2.5 *	24-hour	-	-	-	-	-	35 *	98th percentile, 3-yr avg.
	1-year	-	25	annual mean	25	annual mean	12 *	annual mean

- Not applicable, no value for this parameter.

** Particulate Matter less than 2.5 micro-metres in diameter. Note that PM2.5 limit value has been aligned to US Standard (40 CFR 50) (i.e. Not UK).*

† Note that NO_2 limit of 40µg/m³ applies for human health and 30µg/m³ for protection of vegetation and ecosystems.

FOR CONSULTATION PURPOSES ONLY

Continued…

Proposed Legislative Changes: Align Bermuda's 'Limit-Values' to UK Air Quality Objective 'Target-Values'. (2/3)

All Units: Micrograms per cubic metre (µg/m^3).		Bermuda Clean Air Regs. 1993	UK Air Quality Standards Regs. 2010 ('Limit-Values')		UK Air Quality Objectives 2010 'Target-Values'		Proposed Amendments to Bermuda Clean Air Regulations ('Limit-Values')	
Air Contaminant	**Period of monitoring**	**Concentration Limit**	**Concentration Limit**	Max. No. exceedances per year	**Concentration Target**	Max. No. exceedances per year	**Concentration Limit**	Max. No. exceedances per year
Carbon Monoxide	1-hour	15000	-	-	-	-	15000	-
	8-hour	6000	10,000	-	10000	running 8-hour mean	6000	running 8-hour mean
Ozone	1-hour	160	-	-	-	-	160	-
	8-hour	-	-	-	100	10	100	10
	1-year	60	-	-	-	-	60	-
Lead	24-hour	50	-	-	-	-	50	-
	30-day	1.5	-	-	-	-	1.5	-
	1-year	-	0.5	annual mean	0.25	annual mean	0.25	annual mean
Hydrogen Chloride	1-hour	100	-	-	-	-	100	-
	24-hour	40	-	-	-	-	40	-
Hydrogen Sulphide	1-hour	14	-	-	-	-	14	-
	24-hour	4	-	-	-	-	4	-
Benzene	1-year	-	5	annual mean	3.25*	annual mean	3.25	running annual mean
PAH as (B[a]P) †	1-year	-	-	-	0.00025	running annual mean	0.00025	running annual mean

† *PAH as (B[a]P) = Poly-Aromatic Hydrocarbon (PAH) as Benzo[a]Pyrene (B[a]P).* *- Not applicable, No value for this parameter.*

* *Value for Scotland and Northern Ireland.*

Proposed Legislative Changes: Align Bermuda's 'Limit-Values' to UK Air Quality Objective 'Target-Values'. (3/3)

- For a better understanding of the health effects of the specific contaminants detectable in ambient air from controlled plants it is recommended to refer to the chemical descriptions provide on following the UK Government website:
  - https://www.gov.uk/government/publications/health-matters-air-pollution/health-matters-air-pollution#how-air-pollution-harms-health

Proposed Legislative Changes: Methodologies and Processes for Measuring Contaminants in Ambient Air.

- The proposed *Clean Air Amendment Regulations 2024* provide a list of US, EU and UK air quality measurement methods as either:
  - '*Reference*' and '*Equivalent*' Standards, or
  - '*Indicative*' Monitoring Methods.
- It is noted that the '*Reference*' and '*Equivalent*' methods provide the greater level of accuracy than '*Indicative*' air quality sensors, though the '*Indicative*' sensors can be readily deployed in many more locations that are normally inaccessible for the larger '*Reference*' methods (*i.e.* US EPA 'Siting' requirements are limiting).
- DENR, with BIOS, is studying data from the co-location of a promising '*Indicative*' sensor with a US EPA '*Reference*' method at East Broadway.
- '*Indicative*' sensors may necessitate supplemental air dispersion modelling or the need to subsequently locate a '*Reference*' method station at a suitable location.
- The proposed *Regulations* provides language to the benefits of both sensor types.

Proposed Legislative Changes: Clean Air Odour Regulations (1/4)

- Many types of '*Controlled Plants*' will generate odours that are particular to the licenced process and facility. For example:
  - Aerated Sewage Treatment Plants
  - Spray Paint Facilities
  - Fuel Storage Facilities
  - Electrical Generators
  - Incinerators
  - Waste Management Sites, etc
- Odours are only considered to be a '*nuisance*' once above a particular concentration, however, determining odour concentration is complex and lacks threshold limits, while the human nose often provides the best assessment method.
- Most methods rely upon diluting the offending odour with odourless-air to the point where the odour is no longer '*detectable*' by trained assessors.
- This Dilution-to-Threshold (D/T) method will consider the odour a 'nuisance' if:
  - The majority of three or more trained assessors can '*detect*' the odour after
  - The offending odour has been diluted more than five (5) times (*i.e.* >5:1 dilution) with odourless air. The 5:1 D/T represents the threshold between '*non-nuisance*' and '*nuisance*' odour.

Proposed Legislative Changes: Clean Air Odour Regulations (3/4)

- If a nuisance odour is detected at a neighbours property more than twice in a year, then an *Emission Control Order* will be served on the licencee.
- Once an *Emission Control Order* is served then the licencee will need to develop an *Air Quality Action Plan* (AQAP) for approval by the Minister in order to demonstrate how the nuisance-odour will be mitigated (See slide #19 below on AQAPs).
- There are a range of measures available that can be used to help mitigate the impact of '*nuisance-odours*' to neighbours. These include, but are not limited to:
  - Physical abatement measures applied to the exhaust stacks (*i.e.* filters)
  - Taller or off-set exhaust stacks to aide dispersion before exhaust reaches nearest neighbours.
  - Changes to the processes, chemicals/fuels used, equipment, enclosures.
  - Changes to operating hours, etc.

Proposed Legislative Changes: *Clean Air Odour Regulations (4/4)*

Training:

- Some odour measurement processes in other jurisdictions can rely upon a backup third-party assessment by independent odour assessors. However, odour samples collected in inert sample bags are understood to be unusable as the storage period approaches 24-hours. It would therefore be unrealistic for Bermuda to adopt such a third-party verification model.
- Personnel from DENR and Dept of Health have already undergone initial odour assessment training using the in-house odour dilution equipment procured from Canada with online training.
- It is evident that additional training of personnel from DENR and Dept. of Health (DoH) is necessary to determine who can be considered a qualified assessor under challenging in-field conditions at established testing centres.
- Additional training is due to complete in 2024 for DENR/DoH before the end of the '*Transitional Provisions*' period for the proposed *Amendments*.

1. Proposed Legislative Changes: Clean Air Odour Regulations

Training:

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- Additional training is due to complete in 2024 for DENR/DoH before the end of the '*Transitional Provisions*' period for the proposed *Amendments*.

Proposed Legislative Changes: BELCO Impacts (1/2)

- The proposed Amendments to the Clean Air Act will help to address two of the three BELCO North Power Station (NPS) impacts, specifically;
  i. Exhaust fumes, through the more stringent air quality limit-values and
  ii. Fumes of hot oils/fuels, through the nuisance odour regulations.
- The third issue, soot fallout, will rely upon existing controls within the Clean Air Act 1991 related to direct or indirect damage to property.
- DENR is continuing to collect data of engines start-ups and complaints for each soot fallout event and is working with Attorney General's Chambers to identify how the Act can be used to address air pollution that is causing damage to property.

Proposed Legislative Changes: BELCO Impacts (2/2)

- It is important to note the following observations with regards to the soot fallout from the BELCO NPS engines:
  - The NPS stacks have caused considerable complaints from the public who are experiencing initially black marks followed by orange rust stains over their roofs, patios, pathways, gardens and vehicles.
  - DENR understands that these soot ejection episodes (i) typically follow an engine start-up after the engine has been offline, and (ii) are expected to last a period of a few minutes thereby causing the above impacts.
  - Analysis of over 30 properties in the vicinity of the NPS have failed to show any failures of drinking water standards.
  - DENR is aware that BELCO have tried a number of changes to the NPS engines but have yet to fully address the soot fallout issue.
  - DENR has been unable to detect these events from data of BELCO's in-stack sensors and both DENR /BELCO only become aware of these soot fallout episodes once public complaints occur.
  - DENR is not aware of any precedence of such fallout in other jurisdictions and is also not aware of any pass/fail criteria that could be applied if a detection system could be developed.

Proposed Legislative Changes: *Air Quality Action Plans (AQAP)*

- An *Emission Control Order* can be served on a licencee for reasons of:
  - Exceeding the contaminant 'Limit-Values' provided in Schedule 2 of the *Clean Air Amendment Regulations* at grade level.
  - Exceeding the Nuisance Odour limit provided in *Schedule 4* of the *Clean Air Amendment Regulations* at grade level.
  - Contravening a condition of the operating licence.
- If an *Emission Control Order* is served on a licencee then an inspector may require the licencee to submit an *Air Quality Action Plan* (*AQAP*). The *AQAP* shall:
  - Cover a period not exceeding 3-years, as agreed with the inspector and licencee.
  - Be submitted to the Minister within 90-days of the notice date. The Minister shall place the finalized and approved *AQAP* in a Gazette Notice.
  - Include the considered output from at least one public consultation period.
  - Provide a schedule of proposed remediation/mitigation methods to address the *Emission Control Order* using *Best Available Technologies*.
  - Details are provided in the proposed *Fourth Schedule* to the *Clean Air Amendment Act 2024*.

Proposed Legislative Changes: Opacity Limit Reduction for Exhausts from 'Controlled Plants' from 20% to 15% (1/2)

- The proposed Amendments to the *Clean Air Regulations* will reduce the opacity limit of the exhaust gases/smoke from 20% to 15%, averaged over a period of six consecutive minutes in accordance with the US EPA Method 9 (40CFR60) (*i.e.* 15% Smoke-Opacity = 85% Light-Transmittance).
- BELCO's operating licence conditions were recently (2022) amended from 20% to the 15% opacity limit on the proviso from BELCO that this opacity limit would soon be amended in the *Regulations*.
- It is noted that BELCO has a twenty (20) minute concession on engine start-up and shut-down to be above 15% opacity. At other occasions if the opacity is >15% for >30 minutes then that engine is relegated to the bottom of the merit order until the issue causing the excessive opacity is resolved.
- Opacity is measured using visual emission assessment by trained personnel and with camera photography for third-party verification.

Proposed Legislative Changes: Opacity Limit Reduction for Exhausts from 'Controlled Plants' from 20% to 15% (2/2)

- An example of a stack emitting an exhaust with a 20% opacity can be seen in the left-hand image below.
- A 15% Opacity will be less noticeable than the left-hand 20% Opacity image below.

Image may follow, otherwise extrapolate adjacent images to 15%.
15% Opacity

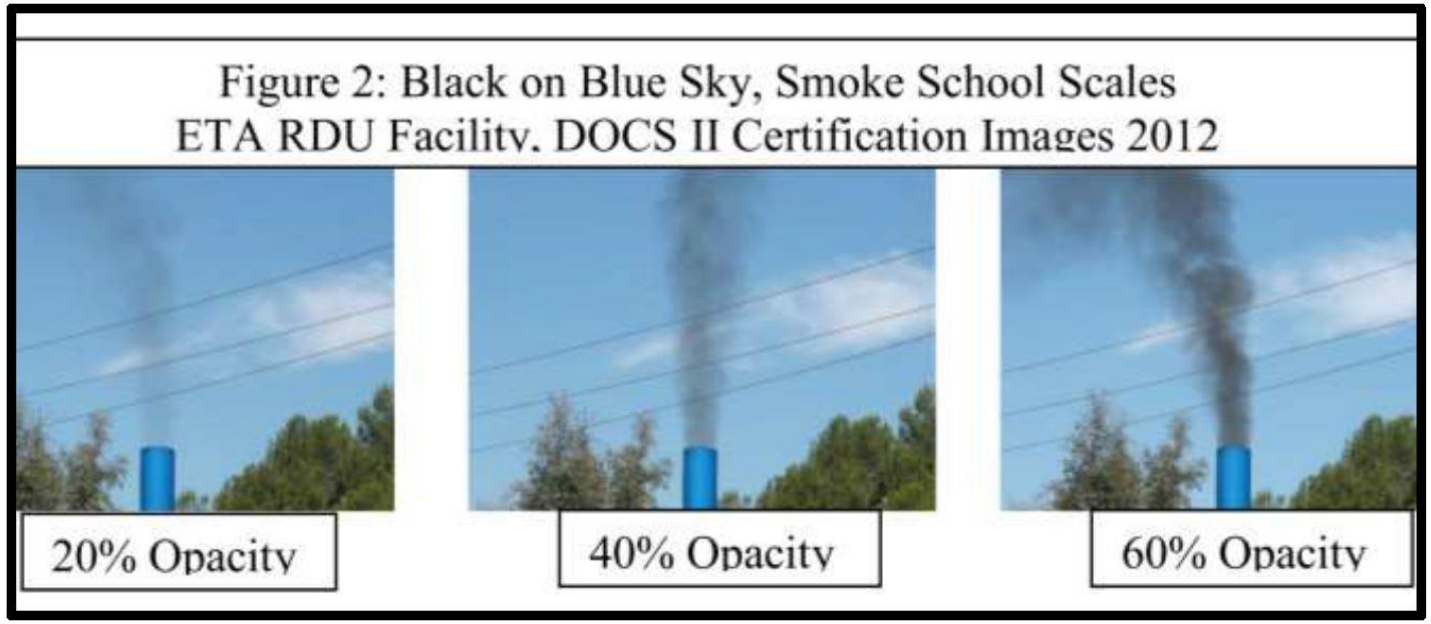

Photo 6: Black smoke opacities (US EPA Environmental Appeals Board May 23, 2016)

Proposed Legislative Changes: ***Increase list of Controlled Chemicals under Schedule 1 of the Clean Air Regulations 1993***

- The list of '*Controlled Chemicals*' under Schedule 1 of the *Clean Air Regulations 1993* has been increased to include all refrigerants from the latest Amendment (*i.e. Kigali Amendment 2016*) to the *Montreal Protocol 1987* (*i.e.* HFC, F-Gases).
- In addition to ozone depleting gases the various replacement chemicals that have a high global warming potential have also been included in the Regulations.
- DENR / Environmental Authority will require permits for the 'Import/Use/Export' of these gases in Bermuda.
- DENR with MPW and Bermuda College will continue to provide update meetings to Permitted Refrigerant Handlers to alert them of the various increasing health and safety considerations of using the latest compliant gases as the HVAC industry moves to the more environmentally-friendly chemicals.
- DENR continues to provide duty-relief on refrigerant recovery equipment.

Proposed Legislative Changes: ***Redefinition of Controlled Plants***

- The First Schedule of the Clean Air Act 1991 provides a list of controlled plants that require construction permits and operating licences.
- '*Facilities for the spray painting of vehicles or machinery*' did not appear to apply to persons spray painting vehicles in the open air or via an inflatable booth on retail sale or service basis because it does not apply to plants that can be 'carried by hand'.
- DENR has received complaints from such operations located within residential zoned neighbourhoods.
- The proposed amendment of the first schedule of the Clean Air Act now includes inflatable structures and open air spray painting operations that are performed on a retail sale or service basis or by a commercial enterprise.

*Proposed Legislative Changes: **Increase in Fines***

- Section 26(2) of the principal Act has been amended to increase fines from $5,000 to $20,000 for offences that are not otherwise detailed.
- Offences for contravening stop orders will remain at a fine not exceeding $50,000.

Clean Air Amendment Bill
Public Consultation

Thankyou for reading!

Please provide any constructive feedback to on the form provided at:

[Web Link]

Dr Geoff Smith
Environmental Engineer
Pollution Control Section