Flint, Katrina

From: Mitchell, BethL

Sent: Wednesday, 27 October 2021 9:32 AM **To:** OConnell, Chris; Cusack, Grant

Cc: Yapp, Phillip

Subject: FW: Airius PureAir and Clean Air Company - Air Treatment Products

Attachments: CAC&Airius_SpecSheet_PHI_CML_Australian_DIGITAL_LR.pdf; CAC&Airius_SpecSheet_PKG_Australian_DIGITAL_LR.pdf;

CAC&Airius_SpecSheet_REME Halo LED_Australian_DIGITAL_LR.pdf; CAC&Airius_SpecSheet_REME Halo_Australian_DIGITAL_LR.pdf;

CAC&Airius_SpecSheet_Avid Air v1 - Digital.pdf; CAC&Airius_SpecSheet_Guardian QR+ v1 - Digital.pdf; CAC&Airius_SpecSheet_HaloRove v3

- Digital.pdf; CAC&Airius_SpecSheet_MiniSplit v1 - Digital.pdf

OFFICIAL

Potential options where outdoor air cannot be provided.

Cheers

Beth Mitchell | Director – Asset Strategies, Sustainability and Environment

Phone: +61 2 6207 8364 | Fax: +61 2 6205 9333 |Email: bethl.mitchell@act.gov.au

Infrastructure and Capital Works | Education | ACT Government

Level 4 220 London Circuit | GPO Box 158 Canberra ACT 2601 | www.det.act.gov.au

From: Sam Rochaix <sam@airius.com.au> Sent: Friday, 8 October 2021 11:18 AM

To: Mitchell, BethL <BethL.Mitchell@act.gov.au>; Banda, Ajay <Ajay.Banda@act.gov.au>

Cc: Laura Matthews < laura@airius.com.au>

Subject: Airius PureAir and Clean Air Company - Air Treatment Products

CAUTION: This email originated from outside of the ACT Government. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Hi Beth and Ajay,

Great to chat earlier Ajay and finalise the proposal for Theodore Primary School.

Just wanted to let you know we have launched our new business The Clean Air Company and the new website www.cleanairco.com.au to distribute two air purification and treatment systems highly effective at inactivating the SARS COV2 virus, other viruses, pathogens, bacteria, VOCs, particulates ACTIVELY in indoor spaces.

Clean Air Company will be selling Airius PureAir fans with Needlepoint Bipolar Ionisation (NPBI) units and Photo Hydro-ionisation (PHI). Both the PHI NPBI cells factory installed into the nozzle of Airius fans to offer unmatched distribution of the active air purification agents. We will also be selling the full range of RGF Environmental PHI systems that can be fitted to most AC systems and even standalone desk to units and wall mounted units with the REME ION and REME HALO ROVE. Please also see the REME Halo LED as used in the Cleaner Air for Schools program in the USA - https://www.cleanerairforschools.com/

The big benefit of PureAir and RGF equipment are that they are ACTIVE air treatment technologies far more effective than PASSIVE HEPA, UVC and other filtration systems. Both NPBI and PHI technology treats the introduced contaminants at the source and within the space. Treated air from HEPA filtration, UVC and other passive systems can instantly be reinfected after treatment whilst areas being treated with the ACTIVE systems continually refresh and disinfect air safely without the reliance of having to pass through a medium. Please don't fall into the same trap as the Victorian government thinking that a standalone HEPA filter will keep staff and students safe indoors. An ACTIVE system is the way to go and proven in the use cases throughout the USA and UK.

Please see some extra info on these videos as follows:

 $RGF-REME\ Halo\ LED-Residential\ Video:\ \underline{https://www.youtube.com/watch?v=wa3nomhaDqY\&t=15s}$

RGF - Commercial benefits video: https://www.youtube.com/watch?v=Zeg6rLwVZjU

Full List of PureAir Case Studies from the UK and Australia:

- o https://www.airius.co.uk/all-resources/rema-1000/
- o https://www.airius.co.uk/all-resources/dobrich-hospital/
- o https://www.airius.co.uk/all-resources/parquesur-shopping-centre/
- o https://www.airius.co.uk/all-resources/mahou-san-miguel/
- o https://www.airius.co.uk/all-resources/airius-pureair-virus-protection-in-consulate/
- o https://www.airius.co.uk/all-resources/clean-room-particle-odour-control/
- o https://www.airius.co.uk/all-resources/npbi-technology-neutralises-sars-cov-2/
- o https://www.airius.co.uk/all-resources/college-campus-air-treatment-system/
- o https://www.airius.co.uk/all-resources/pureair-home-fordingbride/
- o https://www.airius.co.uk/all-resources/anne-lord/
- o https://www.airius.co.uk/all-resources/the-harewood-dental-surgery/
- o https://www.airius.co.uk/all-resources/tandara-lodge-community-care/

We look forward to working with you.

Kind regards,

Sam Rochaix

Regional Sales Director (AU, NZ & SE Asia)

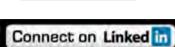




Airius Asia Pacific Pty Ltd | The Clean Air Company

A: PO Box 1812 | Byron Bay | NSW | 2481

P: +61 (0) 2 8034 0598 M: +61 (0) 406 585 402 E: sam@airius.com.au W: www.airius.com.au





Active Air Purification System

- Target particulates
- Reduce pathogens
- Neutralize odors
- Save Energy

www.airius.com.au





Proud y D str buted n Austra a by The C ean A r Company (Master D str butors), a subs d ary of A r us As a Pac fic



The PHI-CML™ Commercial Air Purification System

The PHI CML™ Commercial air purification units by RGF are designed for installation within commercial and industrial HVAC systems. PHI CML™ systems utilise RGF's PHI CELL® technology and are designed to cover HVAC systems ranging from from 420 880 kw. Each PHI CML™ system is delivered fully assembled for easy installation in the supply plenum providing continuous air purification to reduce airborne and surface bacteria, viruses, odours and mould within the air conditioned space.



Proven Effective at E m nat ng Surface Based and A rborne SARS COV-2 (COV D 19) V rus from nterna spaces*



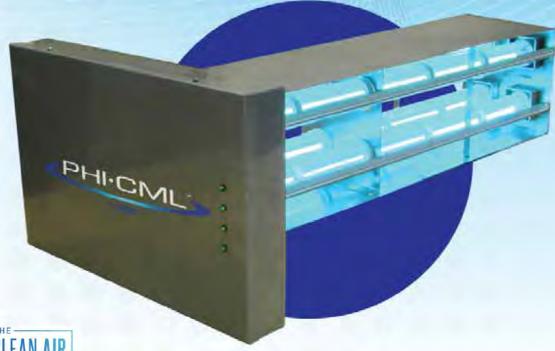
UV-C L GHT



H202



WHOLE BU LD NG







Airius Asia Pacific Pty Ltd | The Clean Air Company

PO Box 1812, Byron Bay, NSW 2481

Phone: 02 8034 0598

Mobile: 0406 585 402 (Sam)

Email: info@cleanairco.com.au

Website: www.a r us.com.au | www.cleanairco.com.au

The PHI CML™ utilises RGF's patented Photohydroionization® (PHI CELL®) technology to substantially reduce airborne and surface bacteria, viruses, odours, mould and VOCs (chemical odours).

Photohydroionization® (PHI) is an active air treatment technology. Active air treatment is the process of reducing air and surface contaminants by recreating safe, natural levels of hydrogen peroxide (H₂O₂) in occupied areas.

RGF's patented PHI CELL® technology combines a photocatalytic process and a multiwavelength UV source to create active air purification. The combination of UV light and a hydrated quad metallic catalyst drives a reaction that produces low level, airborne H₂O₂. RGF's PHI CELL® air treatment systems are operating safely in over four million installations globally.

PHI-CML™ Commercial Air Purification System



ITEM#	ELECTRICAL	PHI-CELL® REPLACEMENT	MATERIALS	WARRANTY
CML-***	100-277 VAC, 50/60 Hz	Recommended after 2 years	Sta n ess stee / Po ymers	1 year
ENGINEE	RED TO FIT SPECIFIC CFM	APPLICATIONS IN LARGE COM	MERCIAL AND INDUSTRIAL EI	NRIRONMENTS
ITEM#	# OF 35" CELLS	# OF 14" CELLS	L/s	кw
CML - 125	2	0	23,500	440
CML - 140	1	3	25,500	500
CML - 150	2	1	28,500	550
CML - 180	2	2	33,100	650
CML - 190	3	0	35,500	680
CML - 215	3	1	40,200	760
CML - 250	4	0	47,200	900





Proud y D str buted n Austra a by The C ean A r Company (Master D str butors), a subs d ary of Arus As a Pac fic



The PHI-PKG™ **Commercial Air Purification System**

The PHI PKG™ package unit uses RGF's patented Photohydroionization® (PHI CELL®) technology to reduce airborne and surface bacteria, viruses, odours and mould.

PHI PKG™ package units are designed specifically for use where the supply duct is not accessible and for large commercial applications. They utilise adjustable magnetic feet with vibration dampers to attach without fasteners to the HVAC fan unit or PKG Rack™ System, making installation fast and simple. PHI PKG™ package units are available with 5", 9", and 14" PHI CELLS®



at E m nat ng Surface Based and A rborne SARS COV-2 (COV D 19) V rus from nterna spaces





UV-C L GHT

H,O,

Ideal for use in:



SCHOOLS

A RPORTS





HOTELS

ROOF TOP HVAC UN TS



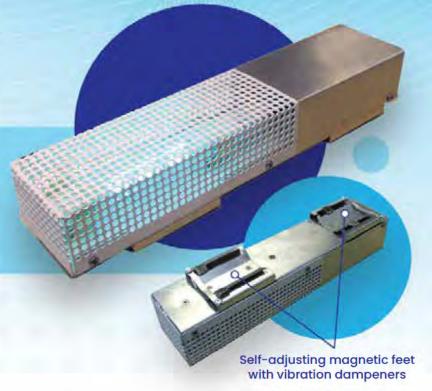




Airius Asia Pacific Pty Ltd | The Clean Air Company

PO Box 1812, Byron Bay, NSW 2481 Phone: 02 8034 0598 0406 585 402 (Sam) Mobile: Email: info@cleanairco.com.au

Website: www.a.r.us.com.au | www.cleanairco.com.au



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PKG-Rack™ Systems

RGF's new PKG Rack™ systems are often used for commercial installati several PHI PKG™ package un required. Multiple package un quickly and easily installed us PKG Rack™ system*. Each rack provides convenient installation up to eight PHI PKG™ units.

Racking the PHI PKG™ package units offers customers the ability to add active air purification to the largest commercial air handlers. See PKG Rack™ specification sheet for more information.



^{*} PKG-Rack™ Part #: CUV-PPS-K t

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ITEM#	AIRFLOW RATES	KILOWATTS	AMPS	DIMENSIONS	SHIPPING W.T.
PH -PKG5-24V	118 to 566 /s	up to 12 kw	0.48	57.15 mm x 266.7 mm x 44.45 mm	0.45 kg
PH -PKG9-24V	566 to 1,416 /s	12 - 26 kw	0.70	57.15 mm x 342.9 mm x 44.45 mm	0.45 kg
PH -PKG14-24V	1,416 to 3,776 /s	26- 70 kw	0.70	57.15 mm x 469.9 mm x 44.45 mm	0.90 kg

MATERIALS

A um num hous ng

PHI-CELL® REPLACEMENT

Recommended after 2 years

WARRANTY 1 year

HYDROGEN PEROXIDE DISTRIBUTION

D str buted through HVAC duct work

INSTALLATION

nsta ed n the HVAC supp y

ELECTRICAL

24 VAC



UL 1598:2008 (3rd Edition). CAN/CSA C22,2 No.250,0:2008







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Proven Effective at E m nat ng

Surface Based and A rborne SARS COV-2 (COV D 19) V rus from nterna spaces

The PHI-PKG™ **Commercial Air Purification System**

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PHI PKG™ package units are designed specifically for use where the supply duct is not accessible and for large commercial applications. They utilise adjustable magnetic feet with vibration dampers to attach without fasteners to the HVAC fan unit or PKG Rack™ System, making installation fast and simple. PHI PKG™ package units are available with 5", 9", and 14" PHI CELLS®





UV-C L GHT

H,O,

Ideal for use in:



SCHOOLS

A RPORTS



RESTUARANTS



ROOF TOP HVAC UN TS





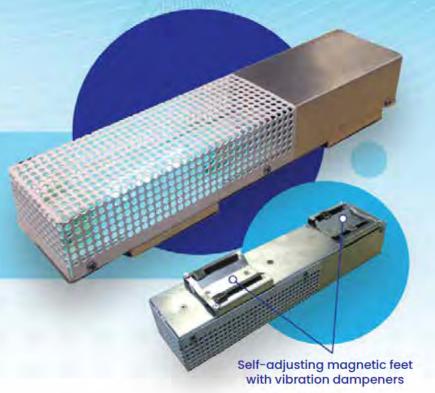




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* PKG-Rack™ Part #: CUV-PPS-K t

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		France Wurting Fox	

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PH -PKG14-24V	1,416 to 3,776 /s	26- 70 kw	0.70	57.15 mm x 469.9 mm x 44.45 mm	0.90 kg

MATERIALS

A um num hous ng

PHI-CELL® REPLACEMENT

Recommended after 2 years

WARRANTY

1 year

INSTALLATION

nsta ed n the HVAC supp y

HYDROGEN PEROXIDE DISTRIBUTION

D str buted through HVAC duct work

ELECTRICAL

24 VAC



UL 1598:2008 (3rd Edition). CAN/CSA C22,2 No.250,0:2008





General Terms and Conditions for Purchase Orders (Goods and/or Services)

1. Provision of Supplies

- 1.1 The Supplier must provide the goods and/or services specified in the Purchase Order (Supplies) according to the provisions of the Purchase Order and these terms and conditions (collectively, Contract) and to a high standard of care, skill and diligence.
- 1.2 Supplies that are goods must be new and unused, free from any security interest, defects in materials and workmanship, of acceptable quality and must conform to any specifications and descriptions set out in the Purchase Order.
- 1.3 If the Supplies contain hazardous substances, the Supplier must provide material safety data sheets for those **6.** hazardous substances.

2. Price of Supplies

- 2.1 Except if otherwise stated in the Purchase Order, the price **7.** for the Supplies is:
 - (a) payable within 30 days of receipt by the Territory of an Invoice;
 - (b) inclusive of GST and all other taxes, duties and charges;and
 - (c) inclusive of all disbursements, including out of pocket expenses incurred by the Supplier.
- 2.2 An Invoice may be issued by the Supplier upon the satisfactory completion of each milestone set out in the Purchase Order, or if no milestones are specified, on the satisfactory completion of all services and acceptance of all goods comprising the Supplies.

3. Delivery and Acceptance

- 3.1 Supplies that are goods must be delivered at the times and places detailed in the Purchase Order, in good order and condition and marked with the relevant Purchase Order Number and full delivery point details. Delivery will be free into store unless otherwise specified in the Contract.
- 3.2 The Territory may reject Supplies supplied incorrectly, damaged, in excess of or less than specified quantities or otherwise found not to be in accordance with the Purchase Order.
- 3.3 If the Territory rejects any Supplies, the Supplier must, at no cost to the Territory and within any timeframe specified by the Territory, remove the Supplies (in the case of goods) and:
 - (a) replace any rejected Supplies that are goods; and
 - (b) re-perform any rejected Supplies that are services; or
 - (c) refund any payment for the rejected Supplies.
- 3.4 If the Territory does not reject the Supplies within 14 days of receiving the Supplies, the Territory is taken to have accepted the Supplies.

4. Title and Risk

Risk of loss and damage and title in Supplies that are goods passes to the Territory on its acceptance of those goods.

5. Warranty

For Supplies that are goods, the Supplier must:

- (a) during any warranty period specified in the Purchase Order, at no cost to the Territory, correct all defects in the Supplies by way of repair, replacement or such other means acceptable to the Territory; and
- (b) ensure, to the extent practicable and permitted by law, that the Territory receives the benefit of any warranty given by a third party with respect to any goods,

however, this does not in any way relieve the Supplier of any obligation or warranty by it under the Contract and the Supplier is liable for all costs incidental to the discharge of any warranty under the Contract.

6. Insurance

The Supplier must effect and maintain for the Purchase Order term any insurances specified in the Purchase Order.

7. Indemnity

The Supplier indemnifies the Territory, its employees and agents against all liability in respect of all claims, costs and expenses in relation to all loss, damage, injury or death to persons or property caused by the Supplier, in connection with the provision of the Supplies, except to the extent that the Territory caused the relevant loss, damage or injury.

8. Cancellation

The Territory may cancel the Purchase Order in part or whole, at any time by notice to the Supplier, if the Supplier:

- (a) enters, or in the Territory's absolute opinion, is likely to enter, into any form of external administration or makes any arrangement with its creditors or takes advantage of any statute for the relief of insolvent debtors:
- (b) fails to provide the Supplies within, or to meet any other, timeframes or milestones specified in this Contract; or
- (c) is otherwise in breach of a provision of this Contract, where that breach:
 - (i) if capable of being remedied, is not remedied within the period specified in a notice by the Territory, or
 - (ii) is not capable of being remedied.

9. Assignment and Subcontracting

The Supplier must not assign or subcontract any of its rights or obligations under this Contract without the prior written consent of the Territory.

10. Applicable Law

The laws of the Australian Capital Territory apply to this Contract.

11. Variation

This Contract may be varied only by the written agreement of the parties prior to the expiration of the Contract.

12. Entire Agreement

The Contract constitutes the entire agreement of the parties in relation to the provision of the Supplies and all other agreements, warranties and representations are excluded.





Proud y D str buted in Austra a by The C ean A r Company (Master D str butors), a subs d ary of A r us As a Pac fic



The REME-HALO® Total Indoor Air Purification System

The REME-HALO® utilises RGF's patented REME®
Cell technology with UV-C light to create low level, airborne hydrogen peroxide throughout the air-conditioned space reducing airborne and surface bacteria, viruses, odours and mould.

The REME-HALO® in-duct air purifier actively neutralises pollutants at the source ensuring excellent indoor air quality.



Proven Effective at E m nat ng Surface Based and A rborne SARS COV-2 (COV D 19) V rus from nterna spaces*







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WHOLE



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Airius Asia Pacific Pty Ltd | The Clean Air Company

PO Box 1812, Byron Bay, NSW 2481

Phone: 02 8034 0598

Mobile: 0406 585 402 (sam)

Email: info@cleanairco.com.au

Website: www.airius.com.au | www.cleanairco.com.au



Why use RGF's REME-HALO®?

The REME HALO® utiliSes RGF's patented REME® Cell technology to recreate nature's process of purifying the air. When installed into the existing air conditioning or heating system air ducts, the REME HALO® produces airborne Hydrogen Peroxide that is distributed through the HVAC system and into the conditioned living space. Unlike passive air technologies, which need pollutants to pass through the unit for purification or filtration, the REME HALO® actively purifies pollutants at the source.

REME-HALO® Total Indoor Air Purification



ITEM#	REPLACEMENT CELL	ELECTRICAL	DIMENSIONS	SHIPPING W.T.
REME-H	PHIC-RH	24 VAC/DC	350.5mm x 165.1mm x 188.0mm Probe 279.4mm /	2.72kg
		0.7Amps 17 Watts	Plate 165.1mm x 190.5mm	

MATERIALS
Aluminum / Polymers

HVAC FAN SIZE 450-3100 L/S CELL REPLACEMENT
Recommended after 2 years

WARRANTY





UL 1598;2008 (3rd Edition) CAN/CSA C22.2 No.250.0:2008







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Proven Effective

at E m nat ng Surface Based and A rborne SARS COV-2 (COV D 19) V rus from nterna spaces*

WE ARE RGF®

The AVID AIR® Air Purification System

The AVID AIR® wall mount air purification system provides efficient airborne and surface bacteria, viruses, odors, and mold reduction. The AVID AIR® unit mounts flush into a wall or ceiling providing an effective, concealed and tamper-proof air purifier for commercial applications.















CLASSROOMS



DAYCARES

Airius Asia Pacific Pty Ltd | The Clean Air Company

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Mobile: 0406 585 402 (Sam)
Email: info@cleanairco.com.au

Website: www.a r us.com.au | www.cleanairco.com.au

RGF ENVIRONMENTAL GROUP, INC.

The AVID AIR® utilizes RGF's patented Photohydroionization® (PHI-CELL®) technology to substantially reduce airborne and surface bacteria, viruses, odors, mold and VOCs (chemical odors).

Photohydroionization® (PHI) is an active air treatment technology. Active air treatment is the process of reducing air and surface contaminants by recreating safe, natural levels of hydrogen peroxide (H_2O_2) in occupied areas.

RGF's patented PHI-CELL® technology combines a photocatalytic process and a multiwavelength UV source to create active air purification. The combination of UV light and a hydrated quad-metallic catalyst drives a reaction that produces low level, airborne H_2O_2 . RGF's PHI-CELL® air treatment systems are operating safely in over four million installations globally.



ITEM#	ELECTRICAL	REPLACEMENT CELL	DIMENSIONS	SHIP WT
BRU-16	120 VAC	DUIO FOA DDU	5.25"W x 2.75"D x 16"H	2 lbs.
BRU-25	220 VAC	PHIC-5GA-BRU	133.4mm x 69.9mm x 406.4mm	0.9 kg.

MATERIALS Aluminum / Stainless steel PHI-CELL® REPLACEMENT Recommended after 2 years COVERAGE Up to 800 sq ft. FAN VOLUME 9 CFM WARRANTY 1 year



UL 867:2011 CAN/CSA C22.2 No.187-M1986







Proud y D str buted n Austra a by The C ean A r Company (Master D str butors), a subs d ary of A r us As a Pac fic



WE ARE RGF®

The Guardian Air QR+ Indoor Air Purification System

The Guardian Air QR+ in-duct air purifier utilizes RGF's proprietary PHI-CELL® technology. Installed into the supply plenum of your existing air conditioning or heating system air ducts, the Guardian Air QR+ in-duct air purifier produces low level, airborne hydrogen peroxide molecules that are distributed by the air handler, through the duct system and into the conditioned space. Unlike passive air technologies, which need pollutants to pass through the unit for purification or filtration, the Guardian Air QR+ in-duct air purifier sweeps through the air conditioned space actively purifying pollutants at the source.



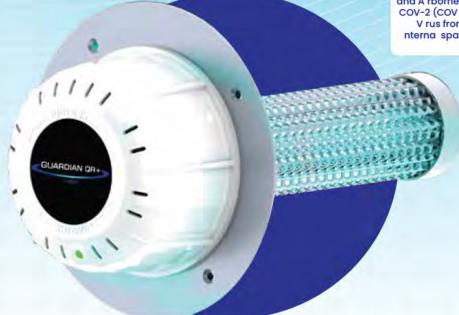




HOME











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Website: www.a r us.com.au | www.cleanairco.com.au

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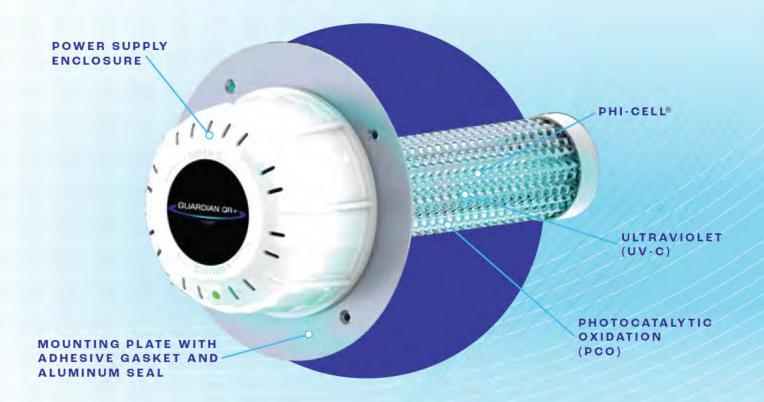
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Guardian Air QR+ Indoor Air Purification



ITEM#	REPLACEMENT CELL	ELECTRICAL	DIMENSIONS	SHIP WT.
QRP-5	PHIC-QR5	24 VAC, 0.47 Amps, 11 Watts	5" Probe / 5.5" Dia. Plate 127mm Probe / 139.7mm Dia. Plate	3 lbs 1.4 kg
QRP-9	PHIC-QR9	24 VAC, 0.6 Amps, 14 Watts	9" Probe / 5.5" Dia. Plate 228.6mm Probe / 139.7mm Dia. Plate	3 lbs 1.4 kg
QRP-14	PHIC-QR14	24 VAC, 0.7 Amps, 17 Watts	14" Probe / 5.5" Dia. Plate 355.6mm Probe / 139.7mm Dia. Plate	4 lbs 1.8 kg

MATERIALS
Aluminum / Polymers

HVAC BLOWER SIZE

300 - 18,000 CFM (509.7 m³/h -11043.57 m³/h)

CELL REPLACEMENT

Recommended after 2 years

WARRANTY

5 year U.S. and Canada (1 year international)









Proud y D str buted n Austra a by The Cean Ar Company (Master D str butors), a subs d ary of Arus As a Pac fic



WE ARE RGF®

The HALO-ROVE™ **Commercial Air Purification System**

The HALO-ROVE™ utilizes RGF's patented PHI-CELL® technology to substantially reduce airborne and surface bacteria, viruses, odors, and mold. Within minutes of operation, results show safe, clean air throughout the treated space.

The HALO-ROVE™ is designed as a standalone, portable active air purifier capable of treating up to 1,000 square feet.











Proven Effective at E m nat ng Surface Based and A rborne SARS COV-2 (COV D 19) V rus from nterna spaces*

Ideal for use in:





















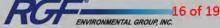


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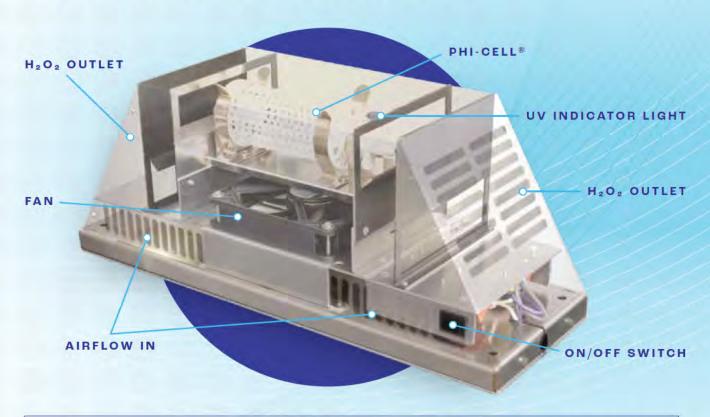


The HALO-ROVE™ utilizes RGF's patented Photohydroionization® (PHI-CELL®) technology to substantially reduce airborne and surface bacteria, viruses, odors, mold and VOCs (chemical odors).

Photohydroionization® (PHI) is an active air treatment technology. Active air treatment is the process of reducing air and surface contaminants by recreating safe, natural levels of hydrogen peroxide (H_2O_2) in occupied areas.

RGF's patented PHI-CELL® technology combines a photocatalytic process and a multiwavelength UV source to create active air purification. The combination of UV light and a hydrated quad-metallic catalyst drives a reaction that produces low level, airborne H_2O_2 . RGF's PHI-CELL® air treatment systems are operating safely in over four million installations globally.

HALO-ROVE™ Commercial Air Purification System



ITEM#	REPLACEMENT CELL	ELECTRICAL	WATTS	DIMENSIONS	SHIP WT.
CAPS-CMTR-120-R	PHIC-CAPS-CMTR	120 VAC	12	18"W x 6.25"H x 6.25"D	5 lbs.
				457.2mm x 158.8mm x 158.8mm	2.27 kg.

MATERIALS

Stainless steel housing

PHI-CELL® REPLACEMENT Recommended after 2 years

WARRANTY

1 year







Proud y D str buted n Austra a by The C ean A r Company (Master D str butors), a subs d ary of A r us As a Pac fic



WE ARE RGF®

The PHI-MSP Mini Split Air Purification System

The PHI-MSP mini split air purification system uses RGF's patented Photohydroionization® (PHI-CELL®) technology to reduce airborne and surface bacteria, viruses, odors, and mold spores.

The PHI-MSP is easily mounted onto mini split AC units without modification by using hook-and-loop adhesive strips. The PHI-MSP incorporates its own pull out reusable germicidal filter and installs into any 100-277 VAC power supply.









Ideal for use in:

















Airius Asia Pacific Pty Ltd | The Clean Air Company PO Box 1812, Byron Bay, NSW 2481

Phone: 02 8034 0598

Mobile: 0406 585 402 (sam)

Email: info@cleanairco.com.au

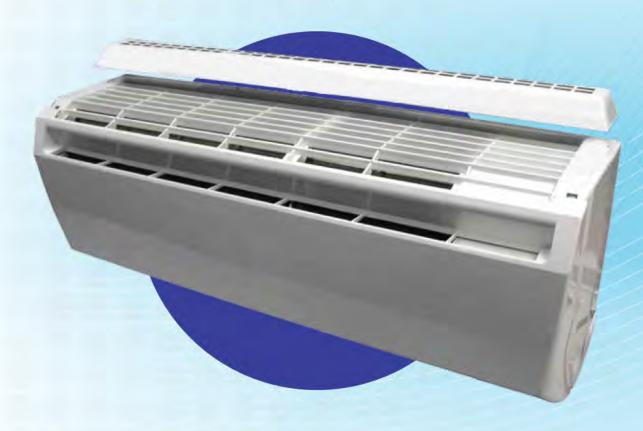
Website: www.a r us.com.au | www.cleanairco.com.au



Photohydroionization® (PHI) is an active air treatment technology. Active air treatment is the process of reducing air and surface contaminants by recreating safe, natural levels of hydrogen peroxide (H_2O_2) in occupied areas.

RGF's patented PHI-CELL® technology combines a photocatalytic process and a multiwavelength UV source to create active air purification. The combination of UV light and a hydrated quad-metallic catalyst drives a reaction that produces low level, airborne H_2O_2 . RGF's PHI-CELL® air treatment systems are operating safely in over four million installations globally.

PHI-MSP Mini Split Air Purification System



TEM#	REPLACEMENT CELL	ELECTRICAL	WATTS	DIMENSIONS	SHIP WT.
MINI SPLIT-HVAC-PHI-110	PHIC-5MS-GA	110 VAC	13.2	30"W x 1.25"H x 2.5"D	3 lbs.
IINI SPLIT-HVAC-PHI-230	PHIC-5MS-GA	230 VAC	9	762mm x 31.8mm x 63.5mm	1.36 kg.

MATERIALS

Aluminum / Polymers

HVAC BLOWER SIZE

250 - 2,000 CFM (424.75 m³/h -3398.02 m³/h)

CELL REPLACEMENT

Recommended after 2 years

WARRANTY

2 year U.S. and Canada (1 year international)





From: <u>Mitchell, BethL</u>

To:

Cc: Yapp, Phillip; Graham, Cathy

Subject: Purchase order - immediate supply and delivery of 2 HRV

 Date:
 Wednesday, 27 October 2021 4:43:10 PM

 Attachments:
 IAO-PO-HRV2Units-StiebelEltron.pdf

IAO-QTE-HRV2Units-StiebelEltron.pdf
IAO-PO-HRV2Units-StiebelEltron-General Terms and Conditions for Purchase Orders.pdf

OFFICIAL



Please find attached the purchase order for the supply and delivery of 2 HRV units for the ACT Education Directorate.

I have also provided the Purchase Order terms and conditions. Acceptance of the purchase order is taken as acceptance of the terms and conditions.

You will also need to complete and return the ACT Government New Supplier form if you have not delivered service to the ACT Government previously, the form can be found at https://www.accesscanberra.act.gov.au/s/article/act-government-supplier-registration-tab-overview

Many thanks for your assistance in providing solutions to improve the ventilation of ACT classrooms.

We look forward to receiving and ETA so that we can arrange installation.

Cheers

Beth Mitchell | Director – Asset Strategies, Sustainability and Environment

Phone: +61 2 6207 8364 | Fax: +61 2 6205 9333 | Email: bethl.mitchell@act.gov.au Infrastructure and Capital Works | Education | ACT Government Level 4 220 London Circuit | GPO Box 158 Canberra ACT 2601 | www.det.act.gov.au



Purchase Order

		Date:			1	20/10/2021	
		Purcha	ase Orde	r No:	J	AQ009	
Requesting	Section Buyer: Phil Yapp						
3.5	plier Name: Stiebel Eltron (Aust) Pty Lt 4 Salmon Street, Port Melbourne, VIC 3207	td					
Contact Na	me:]	(Contac	t Numbe	r:	
Ship to Loca	ation (if applicable) or work site: Hedley Beare C	Centre for	Teaching	g and L	earning,	Fremantle Drive	e, Stirling
Short descr and tw (2)	iption of goods/services: Supply and delivery of ZVRL-C CU.	two (2) VI	RL-C 870	G Pre	mium hea	at recovery ven	tilation units
Price Freight	Fixed Variable Quotes Attack			No No		Delivery Require	ed by
Line No	Description			Qty	Unit	Unit Price	Total
200	VRL-C 870 G Premium			2			
300	ZVRL-C CU			2			
						-	
		C	ST 1004				1 779
		G:	ST 10%			TOTAL	1,778
		G:	ST 10%			TOTAL	1,778 19,566.80
Requesting	Officer: Phil Yapp	G		re:		TOTAL	2S
4575 ASSOCI	Officer: Phil Yapp	G	Signatu			TOTAL	2S
4575 ASSOCI	Officer: Phil Yapp : 0435 655 176	G			021	TOTAL	2S
Contact No	: 0435 655 176		Signatur Date: 20	0/10/2			2S
Contact No			Signatur Date: 20	0/10/2			2S
Contact No	: 0435 655 176 dress: Hedley Beare Centre for Teaching and Le		Signatu Date: 20 remantle	0/10/2 Drive,			19,566.80

Name and Title of Approving Officer	Signature: Beth Mitchell
(Signatory confirms holding delegation to expend funds)	
	Date: 27/10/2021

Stiebel Eltron (Aust) Pty Ltd 294 Salmon Street Port Melbourne VIC 3207 Australia ABN # 82 066 271 083



Customer Number 1130486
ACT Education Directorate
220 London Cct, AU
CANBERRA 2601

Ship-to party: 1119201
ACT Education Directorate
220 London Cct, AU
CANBERRA ACT 2601

	Quotation	
Сору		
Number	10158586 -	ZAG
Date	19.10.2021	
PO Number	Classroom Ventilation	n
Contact		
E-Mail		
Valid from	19.10.2021	
Valid to	31.12.2021	
Our Tax number	82066271083	

Page 1 of 2

Currency AUD

PLEASE NOTE

FOR ANY QUERIES IN RELATION TO THIS QUOTATION / ORDER, PLEASE CONTACT STIEBEL ELTRON REPRESENTATIVE BELOW:

r – ACT Mobile: Email

Quote provided to
Beth Mitchell
Director Asset Strategies
Sustainability and Environment at ACT Education Directorate

Conditions:

Terms of Delivery: Free Carrier Shipping conditions: Direct Delivery

Terms of payment Advance Payment

I CITII	3 or payment	Advance i ayment			
Pos.			Item Detail		
200	Material:	204132	VRL-C 870 G Premiu	m	
	Quantity:	2 PC	EAN: 4017212	041321	
	Price:	Туре	Amount	Unit	Value
		Net price	AUD per	1 PC	
300	Material:	204144	ZVRL-C CU		
	Quantity:	2 PC	EAN: 4017212	041444	
F	Price:	Туре	Amount	Unit	Value
		Net price	AUD per	1 PC	

Stiebel Eltron (Aust) Pty Ltd 294 Salmon Street Port Melbourne VIC 3207 Australia ABN # 82 066 271 083



Document 10158586

Date 19.10.2021

Page 2 of 2

Total net		17,788.00
Goods / Services Tax	10.000 %	1,778.80

Final amount 19,566.80

Weights - Volume:					
Net weight:	243.2 KG	Gross weight:	286 KG	Volume:	2,835 CD3

NOTE
DELIVERY / FREIGHT
MAY INCUR ADDITIONAL CHARGES

NOTE

ONSITE COMMISSIONING NOT INCLUDED



General Terms and Conditions for Purchase Orders (Goods and/or Services)

1. Provision of Supplies

- 1.1 The Supplier must provide the goods and/or services specified in the Purchase Order (Supplies) according to the provisions of the Purchase Order and these terms and conditions (collectively, Contract) and to a high standard of care, skill and diligence.
- 1.2 Supplies that are goods must be new and unused, free from any security interest, defects in materials and workmanship, of acceptable quality and must conform to any specifications and descriptions set out in the Purchase Order.
- 1.3 If the Supplies contain hazardous substances, the Supplier must provide material safety data sheets for those **6.** hazardous substances.

2. Price of Supplies

- 2.1 Except if otherwise stated in the Purchase Order, the price **7.** for the Supplies is:
 - (a) payable within 30 days of receipt by the Territory of an Invoice;
 - (b) inclusive of GST and all other taxes, duties and charges;and
 - (c) inclusive of all disbursements, including out of pocket expenses incurred by the Supplier.
- 2.2 An Invoice may be issued by the Supplier upon the satisfactory completion of each milestone set out in the Purchase Order, or if no milestones are specified, on the satisfactory completion of all services and acceptance of all goods comprising the Supplies.

3. Delivery and Acceptance

- 3.1 Supplies that are goods must be delivered at the times and places detailed in the Purchase Order, in good order and condition and marked with the relevant Purchase Order Number and full delivery point details. Delivery will be free into store unless otherwise specified in the Contract.
- 3.2 The Territory may reject Supplies supplied incorrectly, damaged, in excess of or less than specified quantities or otherwise found not to be in accordance with the Purchase Order.
- 3.3 If the Territory rejects any Supplies, the Supplier must, at no cost to the Territory and within any timeframe specified by the Territory, remove the Supplies (in the case of goods) and:
 - (a) replace any rejected Supplies that are goods; and
 - (b) re-perform any rejected Supplies that are services; or
 - (c) refund any payment for the rejected Supplies.
- 3.4 If the Territory does not reject the Supplies within 14 days of receiving the Supplies, the Territory is taken to have accepted the Supplies.

4. Title and Risk

Risk of loss and damage and title in Supplies that are goods passes to the Territory on its acceptance of those goods.

5. Warranty

For Supplies that are goods, the Supplier must:

- (a) during any warranty period specified in the Purchase Order, at no cost to the Territory, correct all defects in the Supplies by way of repair, replacement or such other means acceptable to the Territory; and
- (b) ensure, to the extent practicable and permitted by law, that the Territory receives the benefit of any warranty given by a third party with respect to any goods,

however, this does not in any way relieve the Supplier of any obligation or warranty by it under the Contract and the Supplier is liable for all costs incidental to the discharge of any warranty under the Contract.

6. Insurance

The Supplier must effect and maintain for the Purchase Order term any insurances specified in the Purchase Order.

7. Indemnity

The Supplier indemnifies the Territory, its employees and agents against all liability in respect of all claims, costs and expenses in relation to all loss, damage, injury or death to persons or property caused by the Supplier, in connection with the provision of the Supplies, except to the extent that the Territory caused the relevant loss, damage or injury.

8. Cancellation

The Territory may cancel the Purchase Order in part or whole, at any time by notice to the Supplier, if the Supplier:

- (a) enters, or in the Territory's absolute opinion, is likely to enter, into any form of external administration or makes any arrangement with its creditors or takes advantage of any statute for the relief of insolvent debtors:
- (b) fails to provide the Supplies within, or to meet any other, timeframes or milestones specified in this Contract; or
- (c) is otherwise in breach of a provision of this Contract, where that breach:
 - (i) if capable of being remedied, is not remedied within the period specified in a notice by the Territory, or
 - (ii) is not capable of being remedied.

9. Assignment and Subcontracting

The Supplier must not assign or subcontract any of its rights or obligations under this Contract without the prior written consent of the Territory.

10. Applicable Law

The laws of the Australian Capital Territory apply to this Contract.

11. Variation

This Contract may be varied only by the written agreement of the parties prior to the expiration of the Contract.

12. Entire Agreement

The Contract constitutes the entire agreement of the parties in relation to the provision of the Supplies and all other agreements, warranties and representations are excluded.

From: Pilicic, Courtney on behalf of EDU, EGMBSG

To: Steele, Peter; EDU, EGMBSG; Elton, Kathryn

Cc: EDUCOVID; DDGEDUoffice

Subject: RE: FOR CLEARANCE: Select Committee Inquiry into the COVID-19 2021 Pandemic Response Hearing Briefs

- 01.10 Ventilation in schools in response to COVID-19

Date: Thursday, 28 October 2021 5:35:00 PM

Attachments: 01.10. Ventilation in Schools in response to COVID-19.tr5

image001.png

FW FOR ADVICE ASAP PLEASE Select Committee Inquiry into the COVID-19 2021 Pandemic Response

Hearing Briefs - 01.10 Ventilation in schools in response to COVID-19.msg

OFFICIAL

Hi all,

As per Andrew's email (attached), I have updated the figure to align with the funding brief of \$2.6 Million.

Can you please advise if this can progress?

Kind regards, Courtney

Courtney Pilicic | Executive Support Officer to David Matthews

Phone: 6207 8330 | Email: courtney.pilicic@act.gov.au

Office of the Executive Group Manager | Business Services | Education | ACT Government

220 London Circuit, Canberra City ACT 2612 | GPO Box 158 Canberra ACT 2601

www.education.act.gov.au | Facebook | Twitter | Pinterest | LinkedIn | Google+

From: Steele, Peter < Peter. Steele@act.gov.au>
Sent: Thursday, 28 October 2021 1:06 PM

To: EDU, EGMBSG <EGMBSG.EDU@act.gov.au>; Elton, Kathryn <Kathryn.Elton@act.gov.au> **Cc:** EDUCOVID <EDUCOVID@act.gov.au>; DDGEDUoffice <DDGEDUoffice@act.gov.au> **Subject:** RE: FOR CLEARANCE: Select Committee Inquiry into the COVID-19 2021 Pandemic

Response Hearing Briefs - 01.10 Ventilation in schools in response to COVID-19

OFFICIAL

Courtney can you please have the figure in the brief confirmed –

• \$2 Million of additional funding has been allocated to undertake short term actions across the public school portfolio to maximise fresh air in learning spaces.

The finance brief notes:

• Improving ventilation in ACT public schools (\$2.6m in capital), along with associated costs relating to increased HVAC maintenance and increased electricity usage (\$0.3m)

Peter Steele

COVID Coordination Team - ACT EDU

0423 390 998

From: Martinez, Catherine < Catherine.Martinez@act.gov.au > On Behalf Of EDU, EGMBSG

Sent: Thursday, 28 October 2021 12:43 PM

To: Steele, Peter <<u>Peter.Steele@act.gov.au</u>>; Elton, Kathryn <<u>Kathryn.Elton@act.gov.au</u>>; Cc: EDUCOVID <<u>EDUCOVID@act.gov.au</u>>; DDGEDUoffice <<u>DDGEDUoffice@act.gov.au</u>>; EDU,

EGMBSG < EGMBSG.EDU@act.gov.au >

Subject: FW: FOR CLEARANCE: Select Committee Inquiry into the COVID-19 2021 Pandemic

Response Hearing Briefs - 01.10 Ventilation in schools in response to COVID-19

Importance: High

OFFICIAL

Good afternoon Peter and Kathryn

Please see attached TRIM link for your review and progression to DDG, approved by EGMBSG David Matthews.

Regards Catherine

From: Matthews, David < <u>David.Matthews@act.gov.au</u>>

Sent: Thursday, 28 October 2021 11:27 AM **To:** DDGEDUoffice < DDGEDUoffice@act.gov.au>

Subject: FW: FOR CLEARANCE: Select Committee Inquiry into the COVID-19 2021 Pandemic

Response Hearing Briefs - 01.10 Ventilation in schools in response to COVID-19

OFFICIAL

Approved, with thanks. Whats with the bolded text? If not requested specially please remove.

Dave Matthews EGM BSG

From: Martinez, Catherine < Catherine < Catherine.Martinez@act.gov.au > On Behalf Of EDU, EGMBSG

Sent: Wednesday, 27 October 2021 11:45 AM

To: Matthews, David < <u>David.Matthews@act.gov.au</u>>

Cc: EDU, EGMBSG < EGMBSG.EDU@act.gov.au >

Subject: FW: FOR CLEARANCE: Select Committee Inquiry into the COVID-19 2021 Pandemic

Response Hearing Briefs - 01.10 Ventilation in schools in response to COVID-19

OFFICIAL

Good morning David

Please find attached hearings brief on 01.10. Ventilation in Schools in response to COVID-19 for your clearance.

Regards Catherine

From: Stewart, Ell < Ell. Stewart@act.gov.au > On Behalf Of ICW EBM Office

Sent: Wednesday, 27 October 2021 10:53 AM **To:** EDU, EGMBSG < <u>EGMBSG.EDU@act.gov.au</u>> **Cc:** ICW EBM Office < <u>ICWEBMOffice@act.gov.au</u>>

Subject: FW: FOR CLEARANCE: Select Committee Inquiry into the COVID-19 2021 Pandemic

Response Hearing Briefs - due to MCR 27 October 2021

OFFICIAL

Good morning

01.10. Ventilation in Schools in response to COVID-19 brief is in TRIM for clearance please – due to EGMBS by 11am

Thanks, Ell

From: Parkinson, Andrew < Andrew.Parkinson@act.gov.au >

Sent: Wednesday, 27 October 2021 10:48 AM **To:** ICW EBM Office <ICWEBMOffice@act.gov.au>

Subject: FW: FOR CLEARANCE BY 11AM PLS: Select Committee Inquiry into the COVID-19 2021

Pandemic Response Hearing Briefs - due to MCR 27 October 2021

OFFICIAL

Cleared – no changes

Andrew Parkinson | Executive Branch Manager

Infrastructure & Capital Works | Education Directorate | ACT Government

Phone 02 6205 4593 | **Mobile 0478 301 085** 220 London Circuit, Civic | <u>www.act.gov.au</u>

Dhawura nguna, dhawura Ngunnawal

From: Stewart, Ell < Ell.Stewart@act.gov.au > On Behalf Of ICW EBM Office

Sent: Wednesday, 27 October 2021 10:03 AM

To: Mitchell, BethL < BethL.Mitchell@act.gov.au; Parkinson, Andrew

<Andrew.Parkinson@act.gov.au>

Cc: ICW EBM Office < ICWEBMOffice@act.gov.au>; Ryan, JohnW < JohnW.Ryan@act.gov.au> **Subject:** FOR CLEARANCE BY 11AM PLS: Select Committee Inquiry into the COVID-19 2021

Pandemic Response Hearing Briefs - due to MCR 27 October 2021

OFFICIAL

Thanks Beth

Andrew, please clear the brief in TRIM before 11am for EGMBS

Thanks, Ell

From: Mitchell, BethL < BethL.Mitchell@act.gov.au Sent: Wednesday, 27 October 2021 9:46 AM

To: ICW EBM Office < ICWEBMOffice@act.gov.au

Subject: RE: REMINDER DUE NOW: FOR ACTION: Select Committee Inquiry into the COVID-19

2021 Pandemic Response Hearing Briefs - due to MCR 27 October 2021

OFFICIAL

This is completed

Beth Mitchell | Director – Asset Strategies, Sustainability and Environment

Phone: +61 2 6207 8364 | Fax: +61 2 6205 9333 | Email: bethl.mitchell@act.gov.au

Infrastructure and Capital Works | Education | ACT Government

Level 4 220 London Circuit | GPO Box 158 Canberra ACT 2601 | www.det.act.gov.au

From: Stewart, Ell < Ell. Stewart@act.gov.au > On Behalf Of ICW EBM Office

Sent: Tuesday, 26 October 2021 4:18 PM

To: Mitchell, BethL < BethL.Mitchell@act.gov.au>

Cc: Ryan, JohnW < <u>JohnW.Ryan@act.gov.au</u>>; ICW EBM Office < <u>ICWEBMOffice@act.gov.au</u>>;

Parkinson, Andrew < <u>Andrew.Parkinson@act.gov.au</u>>

Subject: REMINDER DUE NOW: FOR ACTION: Select Committee Inquiry into the COVID-19 2021

Pandemic Response Hearing Briefs - due to MCR 27 October 2021

Importance: High

OFFICIAL

Hi Beth, just a reminder this brief is due now as it needs to be with EGMBS by 11am tomorrow

Thanks, Ell

From: Stewart, Ell < Ell. Stewart@act.gov.au > On Behalf Of ICW EBM Office

Sent: Monday, 25 October 2021 5:38 PM

To: Mitchell, BethL < BethL.Mitchell@act.gov.au >

 $\textbf{Cc:} \ \ \text{Ryan, JohnW}. \\ \text{Ryan@act.gov.au} >; \ \text{ICW EBM Office@act.gov.au} >; \\ \text{ICWEBMOffice@act.gov.au} >; \\ \text{Ryan, JohnW}. \\$

Parkinson, Andrew < <u>Andrew.Parkinson@act.gov.au</u>>

Subject: FW: FOR ACTION: Select Committee Inquiry into the COVID-19 2021 Pandemic

Response Hearing Briefs - due to MCR 27 October 2021

OFFICIAL

Hi Beth

Please update in TRIM the *01.10. Ventilation in Schools in response to COVID-19* brief for EBM clearance by <u>4PM TUE 26 OCT</u>

Thanks, Ell

From: Nott, Georgia < Georgia.Nott@act.gov.au > On Behalf Of EDU Cabinet Liaison Officer

Sent: Monday, 25 October 2021 4:36 PM

To: EDU, EBM P&P <<u>ebmpp.edu@act.gov.au</u>>; CFO EDU Office <<u>CFOEDUOffice@act.gov.au</u>>; ICW EBM Office <<u>ICWEBMOffice@act.gov.au</u>>; EDU, EGMBSG <<u>EGMBSG.EDU@act.gov.au</u>>

Cc: Matthews, David <<u>David.Matthews@act.gov.au</u>>; EDU Cabinet Liaison Officer <<u>EDUCabinet@act.gov.au</u>>

Subject: FOR ACTION: Select Committee Inquiry into the COVID-19 2021 Pandemic Response Hearing Briefs - due to MCR 27 October 2021

Good afternoon

Please refer to below request.

Title/Question	Select Committee Inquiry into the COVID-19 2021 Pandemic Response	
	– Hearing Briefs	
Responsibility	BS	
TRIM	SUB21/7097	
Clearance	EGM BS	
	DDG	
Date Due to MCR	COB Wednesday 27 October 2021	
Comments	DDG	

witnesses on

Friday 29 October 2021. Any additional briefing material required outside of the formal hearing briefing pack is the responsibility of each respective witness/branch.

 Please contact the Assembly team (Vicki or Georgia) if you have any questions at EDUCabinet@act.gov.au.

Rules to follow

- 1. Ensuring formatting is consistent with templates.
- 2. Use Calibri font size 14 for **Key Points** and point size 12 for **Background.** Consider limited other headings to help navigate the brief.
- 3. Make sure the brief title is consistent with the index they need to match, otherwise it is confusing, if the index is wrong let MCR know.
- 4. Your brief should be a maximum of **TWO PAGES** of current information. If it can't fit on two pages, consider what can be deleted, and how you can use language more economically.
- 5. Readability:
 - Formatting consider making certain points bold in the brief to highlight key information
 - o Use of figures wherever possible be consistent
 - o If using percentage incorporate the actual number [beside] the percentage figure (E.g.: 71 percent of schools [64] have implemented PBL.)
 - Referencing specific components on the Annual Report or Budget (if applicable)
 E.g. Occupational Violence (Annual Report p47)
- 6. Use facts, statistics, comparisons with other Australian states and territories and international comparisons at national or sub-national level, where appropriate. Reference where comparative data is sourced.
- 7. Combining related briefs like Teacher Librarian Scholarships (a budget measure) and Teacher Librarians (policy/current state) so it is all in one place. Check data and dates are consistent between both.

Kind regards -

Georgia Nott | Assembly Liaison Officer | Ministerial & Corporate Reporting

Phone: +61 2 620 77111 | Email: georgia.nott@act.gov.au

Communications, Engagement and Government Support | Education | ACT Government GPO Box 158 Canberra ACT 2601

www.education.act.gov.au | Facebook | Twitter | Instagram | LinkedIn





COMMITTEE HEARING BRIEF

Portfolio/s: Education and Youth Affairs

VENTILATION IN SCHOOLS

Talking Points

- Improving air quality in ACT public schools was prioritised ahead of students returning to on campus learning in term 4.
- All learning spaces across the school network have been checked (about 3500) to ensure adequate ventilation.
- Every school has its own Indoor Air Quality Plan which lists actions already undertaken by the Directorate (e.g. HVAC systems change) and actions for schools to undertake each day to improve air quality. These Indoor Air Quality Plans can be found on each school's website.
- Ventilation is one component of a multilayered approach that has been implemented to prevent transmission of COVID-19 in schools.
- The routine use of portable HEPA filters and portable carbon dioxide (CO2) monitors across all ACT schools is not supported at this time, as the evidence for the additional public health benefit of these units over other public health measures and maximising fresh air is currently limited.
- We will continue to be guided by ACT Health and AHPPC advice and the evolving evidence on the specific benefit of these devices in addition to other public health measures in a school setting.
- We appreciate the generosity of school communities in offering air purification units or fundraising for them. These units however, are not currently part of our air quality and ventilation plans for ACT public schools.
- In line with expert advice, we are maximising ventilation by opening windows in classrooms, adjusting HVAC systems and turning on exhaust fans in rooms that have them. The message to the community from schools is, If you would like to make a contribution to your school, please speak with your Principal about which types of donations would be most welcome.

Key Information

- An important part of ACT public schools return to on campus learning in term 4, 2021 is to ensure that there is proper ventilation in line with Health advice for managing COVID-19.
- It's important to note that ventilation is part of the broader suite of controls to reduce the risk of COVID-19 transmission in school settings including vaccination, physical distancing, good hygiene, cleaning and mask use, and should not be considered in isolation of other mitigation strategies
- The CHO, AHPPC, World Health Organisation and Safe Work Australia recommend ensuring fresh air ventilation is optimised in all settings, including through adjusting mechanical systems to increase fresh (external) air supply and reduce air recirculation, and use of natural ventilation such as opening windows and doors.

- The Education Directorate has developed an Indoor Air Quality (IAQ) framework to assess the IAQ of all public schools commencing with ACT public colleges.
- All public school learning areas have been assessed under the IAQ framework with immediate actions implemented to optimise fresh air flow. There are 3500 learning areas in public schools in the ACT (including approx. 3000 classrooms).
- Every school has had an Indoor Air Quality Plan (see example at end of brief)
 completed for the return to on-campus learning this includes a list of actions
 already undertaken by the Directorate (including increasing fresh air ventilation via
 HVAC systems) and actions for schools to undertake each day (including opening
 windows to promote natural ventilation and turning on exhaust fans). These school
 actions will be carried out by non-teaching staff like our Building Service Officers.
- Site specific IAQ plans were provided to all ACT public colleges on 1 October 2021.
- Site specific IAQ plans were provided to all ACT public schools on 22 October 2021.
- From this work, the Education Directorate is confident that fresh air flow can be increased in all public school classrooms to improve ventilation.
- Cooler classroom temperatures during cool weather and warmer classroom temperatures during hotter weather are expected to result from increasing fresh air to learning environments.
- Higher energy bills are anticipated to result from the increase in fresh air as a greater volume of air needs to be heated or cooled.
- The Directorate is investigating technologies to improve air quality in classrooms including modern ventilation systems for toilets and bathrooms and air purification systems and securing the supply of these where appropriate.
- The Directorate is monitoring air quality in learning spaces to further refine the strategy to provide the best ventilation for ACT public schools including pre-schools.
- \$2.6 million of additional funding has been allocated to undertake short term actions across the public school portfolio to maximise fresh air in learning spaces.

Background Information

- ACT public schools are very well placed as there has been an extensive program of work underway to improve school ventilation since the 2019-2020 bushfires.
- The Education Directorate has been progressively upgrading building controls in 65 schools in order to have better control of the air intake sources for the Heating, Ventilation and Cooling (HVAC) systems.
- Many schools have building controls with CO₂ sensors which provides a proxy for ventilation in a room. CO₂ monitoring will commence once students and staff have fully returned on-site in Term 4.
- In 2018, the Education Directorate commenced a program of installing CO₂ sensors in schools. To date, more than 200 CO₂ sensors with remote monitoring and management systems have been installed across 35 public schools. An additional 80 CO₂ sensors have been orderd and are being installed at approximately 30 ACT public schools with suitable building control systems over the coming weeks. This will

- mean 73 per cent (65 of 89) schools will soon have CO₂ sensors to the monitor and manage indoor air quality.
- Not all classrooms are connected to large HVAC systems with CO₂ sensors, however these rooms typically have external natural ventilation and split system air conditioning units so that fresh air can be introduced and air flow maintained.
- Longer term, the Directorate will look to introduce additional mechanical ventilation in spaces that require it. This may include installation of new building control/management systems with CO₂ sensors that can remotely control HVAC systems and windows as well as installing supplemental ventilation such as modern exhaust fans in bathrooms and toilets.

	Canberra High School Indoor Air Quality Plan
Background:	As part of the return to on campus learning in Term 4 2021, ACT Health has advised that schools optimise fresh air circulation as one of the controls to reduce the risk of COVID-19 transmission in schools.
	The risk of COVID-19 transmission is higher in crowded and poorly ventilated spaces where people spend long periods of time together in close proximity. Good ventilation is one part of a suite of controls to minimise transmission in schools, like vaccination, physical distancing, student cohorting, good hygiene, cleaning and mask use.
	This Plan identifies actions that have been undertaken at your school by the Education Directorate and provides additional measures for the school to undertake to optimise the fresh air ventilation in the school in Term 4.
Health Advice:	The Chief Health Officer, the <u>Australian Health Protection Principal</u> <u>Committee</u> , <u>World Health Organisation</u> and <u>Safe Work Australia</u> all recommend good indoor air quality to reduce the chance of COVID-19 transmission.
Advice:	The ventilation systems at Canberra High School have now been assessed by the Directorate in accordance with the WHO guidance.
	Fresh air ventilation will be achieved through a mix of natural (opening windows and doors) and mechanical (cooling and ventilation systems).
	The settings for the Heating, Ventilation and Air Conditioning systems have been reset to achieve good fresh air supply and should not be altered by the school.
	Increasing the fresh air to classrooms may increase energy costs. Classrooms are also likely to experience lower room temperatures during cooler weather and higher room temperatures in warmer weather.
	Learning and teaching spaces with fresh air ventilation from either natural or mechanical systems meet the COVID-19 Health Advice. The school is to prioritise the use of these spaces for indoor teaching and learning along with outdoor spaces.
Daily actions	Additional daily measures the school will undertake include:
to be undertaken by the school in Term 4:	Opening windows and doors in teaching spaces and other shared spaces of the school to supplement fresh air. Windows above ground level are to be opened only where window restriction is in place to ensure student safety. In line with the National Construction Code, window opening is to be 125mm or less.
	Improving air circulation through use of ceiling fans and split system air- conditioning units, only when windows are open.
	Ensure bathroom, kitchen and any other exhaust fans are on and operating at full capacity while the school or program is operating and for some time before and after occupancy.

Actions The following actions have been undertaken by the Directorate and its service providers to increase fresh air ventilation in the indoor teaching and undertaken: learning spaces at the school: air handling units have been programmed to supply additional fresh air via the mechanical ventilation systems evaporative cooling in the school will provide full fresh air when operating in either cooling or fan mode. When not in operation, fresh air is to be provided by opening windows contractors will continue work to audit and enhance the operation of the ventilation systems. Support or For further advice, schools can contact their ICW Network Officer or email ACT.Education@act.gov.au further advice:

From: Stewart, Ell on behalf of ICW EBM Office

To: <u>EDU, EGMBSG</u>
Cc: <u>ICW EBM Office</u>

Subject: FW: FOR ADVICE ASAP PLEASE: Select Committee Inquiry into the COVID-19 2021 Pandemic Response

Hearing Briefs - 01.10 Ventilation in schools in response to COVID-19

Date: Thursday, 28 October 2021 5:26:57 PM

Attachments: <u>image001.png</u>

OFFICIAL

Hi, Andrew has confirmed to please use Peter's figure (\$2.6m in capital) Thanks, Ell

From: Parkinson, Andrew < Andrew. Parkinson@act.gov.au>

Sent: Thursday, 28 October 2021 3:40 PM

To: ICW EBM Office <ICWEBMOffice@act.gov.au>; Mitchell, BethL <BethL.Mitchell@act.gov.au>

Subject: RE: FOR ADVICE ASAP PLEASE: Select Committee Inquiry into the COVID-19 2021 Pandemic Response Hearing Briefs - 01.10 Ventilation in schools in response to COVID-19

OFFICIAL

Use the figure from peter

Andrew Parkinson | Executive Branch Manager

Infrastructure & Capital Works | Education Directorate | ACT Government

Phone 02 6205 4593 | **Mobile 0478 301 085** 220 London Circuit, Civic | <u>www.act.gov.au</u> *Dhawura nguna, dhawura Ngunnawal*

From: Stewart, Ell < Ell.Stewart@act.gov.au > On Behalf Of ICW EBM Office

Sent: Thursday, 28 October 2021 3:02 PM

To: Mitchell, BethL < BethL.Mitchell@act.gov.au>

Cc: Parkinson, Andrew < Andrew.Parkinson@act.gov.au >; ICW EBM Office

<<u>ICWEBMOffice@act.gov.au</u>>

Subject: FOR ADVICE ASAP PLEASE: Select Committee Inquiry into the COVID-19 2021 Pandemic

Response Hearing Briefs - 01.10 Ventilation in schools in response to COVID-19

Importance: High

OFFICIAL

Beth, Can we confirm if the SF figures are the most accurate ones – see below from Peter S? Thanks, Ell

From: Pilicic, Courtney < Courtney. Pilicic@act.gov.au > On Behalf Of EDU, EGMBSG

Sent: Thursday, 28 October 2021 2:06 PM

To: Parkinson, Andrew < <u>Andrew.Parkinson@act.gov.au</u>>; ICW EBM Office

<<u>ICWEBMOffice@act.gov.au</u>>

Cc: EDU, EGMBSG < EGMBSG.EDU@act.gov.au >

Subject: FW: FOR CLEARANCE: Select Committee Inquiry into the COVID-19 2021 Pandemic

Response Hearing Briefs - 01.10 Ventilation in schools in response to COVID-19

Importance: High

OFFICIAL

Hi Andrew/ICW Office,

Are you able to confirm the below by any chance? A response ASAP would be amazing. Kind regards,

Courtney

Courtney Pilicic | Executive Support Officer to David Matthews

Phone: 6207 8330 | Email: courtney.pilicic@act.gov.au

Office of the Executive Group Manager | Business Services | Education | ACT Government

220 London Circuit, Canberra City ACT 2612 | GPO Box 158 Canberra ACT 2601

www.education.act.gov.au | Facebook | Twitter | Pinterest | LinkedIn | Google+

From: Steele, Peter < <u>Peter.Steele@act.gov.au</u>>

Sent: Thursday, 28 October 2021 1:06 PM

To: EDU, EGMBSG < EGMBSG.EDU@act.gov.au >; Elton, Kathryn < Kathryn.Elton@act.gov.au >

Cc: EDUCOVID < <u>EDUCOVID@act.gov.au</u>>; DDGEDUoffice < <u>DDGEDUoffice@act.gov.au</u>>

Subject: RE: FOR CLEARANCE: Select Committee Inquiry into the COVID-19 2021 Pandemic

Response Hearing Briefs - 01.10 Ventilation in schools in response to COVID-19

OFFICIAL

Courtney can you please have the figure in the brief confirmed –

• \$2 Million of additional funding has been allocated to undertake short term actions across the public school portfolio to maximise fresh air in learning spaces.

The finance brief notes:

• Improving ventilation in ACT public schools (\$2.6m in capital), along with associated costs relating to increased HVAC maintenance and increased electricity usage (\$0.3m)

Peter Steele

COVID Coordination Team - ACT EDU

0423 390 998

From: Martinez, Catherine < Catherine.Martinez@act.gov.au > On Behalf Of EDU, EGMBSG

Sent: Thursday, 28 October 2021 12:43 PM

To: Steele, Peter < Peter.Steele@act.gov.au>; Elton, Kathryn < Kathryn.Elton@act.gov.au>

Cc: EDUCOVID < EDUCOVID@act.gov.au >; DDGEDUoffice < DDGEDUoffice@act.gov.au >; EDU,

EGMBSG < EGMBSG.EDU@act.gov.au >

Subject: FW: FOR CLEARANCE: Select Committee Inquiry into the COVID-19 2021 Pandemic

Response Hearing Briefs - 01.10 Ventilation in schools in response to COVID-19

Importance: High

OFFICIAL

Good afternoon Peter and Kathryn

Please see attached TRIM link for your review and progression to DDG, approved by EGMBSG David Matthews.

Regards

Catherine

From: Matthews, David < <u>David.Matthews@act.gov.au</u>>

Sent: Thursday, 28 October 2021 11:27 AM

To: DDGEDUoffice < DDGEDUoffice@act.gov.au>

Subject: FW: FOR CLEARANCE: Select Committee Inquiry into the COVID-19 2021 Pandemic

Response Hearing Briefs - 01.10 Ventilation in schools in response to COVID-19

OFFICIAL

Approved, with thanks. Whats with the bolded text? If not requested specially please remove.

Dave Matthews

EGM BSG

From: Martinez, Catherine < Catherine < Catherine.Martinez@act.gov.au> On Behalf Of EDU, EGMBSG

Sent: Wednesday, 27 October 2021 11:45 AM

To: Matthews, David < <u>David.Matthews@act.gov.au</u>>

Cc: EDU, EGMBSG < EGMBSG.EDU@act.gov.au >

Subject: FW: FOR CLEARANCE: Select Committee Inquiry into the COVID-19 2021 Pandemic

Response Hearing Briefs - 01.10 Ventilation in schools in response to COVID-19

OFFICIAL

Good morning David

Please find attached hearings brief on 01.10. Ventilation in Schools in response to COVID-19 for your clearance.

Regards

Catherine

From: Stewart, Ell < Ell.Stewart@act.gov.au > On Behalf Of ICW EBM Office

Sent: Wednesday, 27 October 2021 10:53 AM **To:** EDU, EGMBSG < <u>EGMBSG.EDU@act.gov.au</u>> **Cc:** ICW EBM Office < <u>ICWEBMOffice@act.gov.au</u>>

Subject: FW: FOR CLEARANCE: Select Committee Inquiry into the COVID-19 2021 Pandemic

Response Hearing Briefs - due to MCR 27 October 2021

OFFICIAL

Good morning

01.10. Ventilation in Schools in response to COVID-19 brief is in TRIM for clearance please – due to EGMBS by 11am

Thanks, Ell

From: Parkinson, Andrew < <u>Andrew.Parkinson@act.gov.au</u>>

Sent: Wednesday, 27 October 2021 10:48 AM

To: ICW EBM Office < < ICWEBMOffice@act.gov.au>

Subject: FW: FOR CLEARANCE BY 11AM PLS: Select Committee Inquiry into the COVID-19 2021

Pandemic Response Hearing Briefs - due to MCR 27 October 2021

OFFICIAL

Cleared – no changes

Andrew Parkinson | Executive Branch Manager

Infrastructure & Capital Works | Education Directorate | ACT Government

Phone 02 6205 4593 | **Mobile 0478 301 085** 220 London Circuit, Civic | <u>www.act.gov.au</u> *Dhawura nguna, dhawura Ngunnawal*

From: Stewart, Ell < Ell.Stewart@act.gov.au > On Behalf Of ICW EBM Office

Sent: Wednesday, 27 October 2021 10:03 AM

To: Mitchell, BethL < BethL.Mitchell@act.gov.au; Parkinson, Andrew

<<u>Andrew.Parkinson@act.gov.au</u>>

Cc: ICW EBM Office < ICWEBMOffice@act.gov.au>; Ryan, JohnW < JohnW.Ryan@act.gov.au> **Subject:** FOR CLEARANCE BY 11AM PLS: Select Committee Inquiry into the COVID-19 2021

Pandemic Response Hearing Briefs - due to MCR 27 October 2021

OFFICIAL

Thanks Beth

Andrew, please clear the brief in TRIM before 11am for EGMBS

Thanks, Ell

From: Mitchell, BethL < BethL.Mitchell@act.gov.au>

Sent: Wednesday, 27 October 2021 9:46 AM

To: ICW EBM Office < ICWEBMOffice@act.gov.au>

Subject: RE: REMINDER DUE NOW: FOR ACTION: Select Committee Inquiry into the COVID-19

2021 Pandemic Response Hearing Briefs - due to MCR 27 October 2021

OFFICIAL

This is completed

Beth Mitchell | Director – Asset Strategies, Sustainability and

Environment

Phone: +61 2 6207 8364 | Fax: +61 2 6205 9333 | Email: bethl.mitchell@act.gov.au

Infrastructure and Capital Works | Education | ACT Government

Level 4 220 London Circuit | GPO Box 158 Canberra ACT 2601 | www.det.act.gov.au

From: Stewart, Ell < Ell.Stewart@act.gov.au > On Behalf Of ICW EBM Office

Sent: Tuesday, 26 October 2021 4:18 PM

To: Mitchell, BethL < BethL.Mitchell@act.gov.au>

Cc: Ryan, JohnW < <u>JohnW.Ryan@act.gov.au</u>>; ICW EBM Office < <u>ICWEBMOffice@act.gov.au</u>>;

Parkinson, Andrew < Andrew.Parkinson@act.gov.au >

Subject: REMINDER DUE NOW: FOR ACTION: Select Committee Inquiry into the COVID-19 2021

Pandemic Response Hearing Briefs - due to MCR 27 October 2021

Importance: High

OFFICIAL

Hi Beth, just a reminder this brief is due now as it needs to be with EGMBS <u>by 11am tomorrow</u> Thanks, Ell

From: Stewart, Ell < <u>Ell.Stewart@act.gov.au</u> > On Behalf Of ICW EBM Office

Sent: Monday, 25 October 2021 5:38 PM

To: Mitchell, BethL < BethL.Mitchell@act.gov.au>

Cc: Ryan, JohnW < <u>JohnW.Ryan@act.gov.au</u>>; ICW EBM Office < <u>ICWEBMOffice@act.gov.au</u>>;

Parkinson, Andrew < <u>Andrew.Parkinson@act.gov.au</u>>

Subject: FW: FOR ACTION: Select Committee Inquiry into the COVID-19 2021 Pandemic

Response Hearing Briefs - due to MCR 27 October 2021

OFFICIAL

Hi Beth

Please update in TRIM the *01.10. Ventilation in Schools in response to COVID-19* brief for EBM clearance by <u>4PM TUE 26 OCT</u>

Thanks, Ell

From: Nott, Georgia < Georgia.Nott@act.gov.au> On Behalf Of EDU Cabinet Liaison Officer

Sent: Monday, 25 October 2021 4:36 PM

To: EDU, EBM P&P <<u>ebmpp.edu@act.gov.au</u>>; CFO EDU Office <<u>CFOEDUOffice@act.gov.au</u>>; ICW EBM Office <<u>ICWEBMOffice@act.gov.au</u>>; EDU, EGMBSG <<u>EGMBSG.EDU@act.gov.au</u>>

Cc: Matthews, David < <u>David.Matthews@act.gov.au</u>>; EDU Cabinet Liaison Officer

<<u>EDUCabinet@act.gov.au</u>>

Subject: FOR ACTION: Select Committee Inquiry into the COVID-19 2021 Pandemic Response Hearing Briefs - due to MCR 27 October 2021

Good afternoon

Please refer to below request.

Title/Question	Select Committee Inquiry into the COVID-19 2021 Pandemic Response – Hearing Briefs
Responsibility	BS
TRIM	SUB21/7097

Clearance	EGM BS DDG
Date Due to MCR	COB Wednesday 27 October 2021
Comments	 We have placed where possible previous briefs to the trim container to assist with drafting/updating. TRIM link attached to folder. Please refer to the <i>Guide to writing Assembly/Hearing Briefs</i> attached to this email to ensure your briefs are high-quality. Some rules to follow are provided below. MCR has allocated a lead branch to each brief, it is the responsibility of the lead to liaise with other branches as required. Please let MCR know asap if we have incorrectly allocated any of the briefs. MCR will undertake quality check on all briefs on Thursday 28 October to ensure quality and consistency. Please be prepared to undertake urgent amendments following these reviews. The hearing pack will be distributed to the Minister and all witnesses on Friday 29 October 2021. Any additional briefing material required outside of the formal hearing briefing pack is the responsibility of each respective witness/branch. Please contact the Assembly team (Vicki or Georgia) if you have any questions at EDUCabinet@act.gov.au.

Rules to follow

- 1. Ensuring formatting is consistent with templates.
- 2. Use Calibri font size 14 for **Key Points** and point size 12 for **Background.** Consider limited other headings to help navigate the brief.
- 3. Make sure the brief title is consistent with the index they need to match, otherwise it is confusing, if the index is wrong let MCR know.
- 4. Your brief should be a maximum of **TWO PAGES** of current information. If it can't fit on two pages, consider what can be deleted, and how you can use language more economically.
- 5. Readability:
 - o Formatting consider making certain points bold in the brief to highlight key information
 - o Use of figures wherever possible be consistent
 - o If using percentage incorporate the actual number [beside] the percentage figure (E.g.: 71 percent of schools [64] have implemented PBL.)
 - o Referencing specific components on the Annual Report or Budget (if applicable) E.g.

Occupational Violence (Annual Report p47)

- 6. Use facts, statistics, comparisons with other Australian states and territories and international comparisons at national or sub-national level, where appropriate. Reference where comparative data is sourced.
- 7. Combining related briefs like Teacher Librarian Scholarships (a budget measure) and Teacher Librarians (policy/current state) so it is all in one place. Check data and dates are consistent between both.

Kind regards –

Georgia Nott | Assembly Liaison Officer | Ministerial & Corporate Reporting

Phone: +61 2 620 77111 Email: georgia.nott@act.gov.au	
Communications, Engagement and Government Support Education	n ACT Government
GPO Box 158 Canberra ACT 2601	
www.education.act.gov.au Facebook Twitter Instagram Linke	<u>dIn</u>
?	
_	

From: <u>Pilicic, Courtney</u> on behalf of <u>EDU, EGMBSG</u>

To: ICW EBM Office
Cc: EDU, EGMBSG

Subject: FW: FOR CLEARANCE: COVID-19 Hearing Preparation Session - Follow up/Actions - 01.10 Ventilation in

Schools in response to COVID-19

Date: Tuesday, 2 November 2021 5:01:25 PM

Attachments: image001.png

Final Briefs - Hearing - 4 November 2021.tr5

01.10. Ventilation in Schools in response to COVID-19.DOCX

UNOFFICIAL

Hi Ell,

Would you know where I can find a copy of the Indoor Air Quality framework?

Kind regards, Courtney

Courtney Pilicic | Executive Support Officer to David Matthews

Phone: 6207 8330 | Email: courtney.pilicic@act.gov.au

Office of the Executive Group Manager | Business Services | Education | ACT Government

220 London Circuit, Canberra City ACT 2612 | GPO Box 158 Canberra ACT 2601

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From: Matthews, David < David. Matthews@act.gov.au>

Sent: Tuesday, 2 November 2021 1:39 PM **To:** EDU, EGMBSG < EGMBSG.EDU@act.gov.au>

Subject: FW: FOR CLEARANCE: COVID-19 Hearing Preparation Session - Follow up/Actions -

01.10 Ventilation in Schools in response to COVID-19

UNOFFICIAL

Approved, with thanks. Can I also get a copy of the Indoor Air Quality (IAQ) framework.

Dave Matthews EGM BSG

From: Martinez, Catherine < Catherine.Martinez@act.gov.au > On Behalf Of EDU, EGMBSG

Sent: Tuesday, 2 November 2021 10:37 AM

To: Matthews, David < <u>David.Matthews@act.gov.au</u>> **Cc:** EDU, EGMBSG < <u>EGMBSG.EDU@act.gov.au</u>>

Subject: FOR CLEARANCE: COVID-19 Hearing Preparation Session - Follow up/Actions - 01.10

Ventilation in Schools in response to COVID-19

UNOFFICIAL

UNOFFICIAL

Good morning David

Please find attached updated brief for you clearance as per below action from prep session yesterday.

Regards Catherine

From: Parkinson, Andrew < <u>Andrew.Parkinson@act.gov.au</u>>

Sent: Tuesday, 2 November 2021 9:06 AM **To:** EDU, EGMBSG < <u>EGMBSG.EDU@act.gov.au</u>>

Cc: ICW EBM Office < ICWEBMOffice@act.gov.au >; EDU Cabinet Liaison Officer

<<u>EDUCabinet@act.gov.au</u>>

Subject: Fw: COVID-19 Hearing Preparation Session - Follow up/Actions

UNOFFICIAL

I've updated the ventilation brief 1.10 as per below for David to clear

Andrew Parkinson | Executive Branch Manager

Infrastructure & Capital Works | Education Directorate | ACT Government

Phone 02 6205 4593 | Mobile 0478 301 085

220 London Circuit, Civic | www.act.gov.au

Dhawura nguna, dhawura Ngunnawal

From: Nott, Georgia < Georgia.Nott@act.gov.au > on behalf of EDU Cabinet Liaison Officer

<<u>EDUCabinet@act.gov.au</u>>

Sent: Monday, 1 November 2021 14:31

To: Haire, Katy < Katy.Haire@act.gov.au>; Simmons, Jane < Jane.Simmons@act.gov.au>;

Efthymiades, Deb < Deb. Efthymiades@act.gov.au >; Matthews, David

- <<u>David.Matthews@act.gov.au</u>>; McMahon, Kate <<u>Kate.McMahon@act.gov.au</u>>; Huxley, Mark
- <<u>Mark.Huxley@act.gov.au</u>>; Moysey, Sean <<u>Sean.Moysey@act.gov.au</u>>; Parkinson, Andrew
- <<u>Andrew.Parkinson@act.gov.au</u>>; Allars, Alex <<u>Alex.Allars@act.gov.au</u>>; Gotts, Robert
- <<u>Robert.Gotts@act.gov.au</u>>; Moore, Nicole <<u>Nicole.Moore@act.gov.au</u>>; Le, Thao
- <Thao.Le@act.gov.au>

Cc: Taber, Emma < Emma.Taber@act.gov.au>; Page, Vicki < Vicki.Page@act.gov.au>; Short, Paul

<Paul.Short@act.gov.au>; EDU Cabinet Liaison Officer <EDUCabinet@act.gov.au>

Subject: COVID-19 Hearing Preparation Session - Follow up/Actions

Good afternoon.

Just touching base to summarise the actions following this morning's prep session. Please action as follows:

@EDU Cabinet Liaison Officer

- <u>@Taber, Emma</u> and <u>@Short, Paul</u> with confirm logistics with Secretary will then work with <u>DG</u> to finalise witness lists. Advice will be provided ASAP.
- Funding Brief to be updated following Cabinet announcement tomorrow. @Short, Paul to confirm timing of announcement with MO.
- RAT Brief to be updated to reflect the updated Health guidelines
- Ventilation Brief to be updated to reflect HEPA filter language/donations
- MCR has updated the Response to date (1.1) to Include Wanniassa details
- MCR has updated the Response to date (1.1) to also include a line around AST positive focus
- MCR will create a brief in conjunction with the new FAQ's on End of Year events formals and add the CHO Guidelines for end of year events etc.
- MCRwill review all briefs to ensure the 'scenario' language is updated

<u>@McMahon, Kate</u> – Update attendance data and information regarding 'learning impact' in Brief 1.05 – Return for T4

<u>@Allars, Alex</u> – Redeployment – to be added to mand vaccination. Include information from updated FAQ's.

<u>@Moysey, Sean</u> – New executive summary on Viability of ECEC – template provided to Sean.

As agreed, <u>updated information is due back to EDUCabinet@act.gov.au by 11am tomorrow</u>, noting the final mandatory vaccination statistics will be provided to David prior to the hearing on Thursday.

Kind regards -

Georgia Nott | Assembly Liaison Officer | Ministerial & Corporate Reporting

Phone: +61 2 620 77111 | Email: georgia.nott@act.gov.au

Communications, Engagement and Government Support | Education | ACT Government GPO Box 158 Canberra ACT 2601

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COMMITTEE HEARING BRIEF

Portfolio/s: Education and Youth Affairs

VENTILATION IN SCHOOLS

Talking Points

- Improving air quality in ACT public schools has been prioritised ahead of students returning to on campus learning this term.
- We have checked all of our learning spaces across the school network about 3500 to ensure adequate ventilation.
- Every school has its own Indoor Air Quality Plan which lists actions already undertaken by the Directorate (e.g. HVAC systems change) and actions for schools to undertake each day to improve air quality. These Indoor Air Quality Plans can be found on each school's website.
- Ventilation is one component of a multilayered approach that has been implemented to prevent transmission of COVID-19 in schools.
- The routine use of portable HEPA filters and portable carbon dioxide (CO2) monitors across all ACT schools is not supported at this time, as the evidence for the additional public health benefit of these units over other public health measures and maximising fresh air is currently limited.
- We will continue to be guided by ACT Health and AHPPC advice and the evolving evidence on the specific benefit of these devices in addition to other public health measures in a school setting.
- We appreciate the generosity of school communities in offering air purification units
 or fundraising for them. These units however, are not currently part of our air quality
 and ventilation plans for ACT public schools. In line with expert advice, we are
 maximising ventilation by opening windows in classrooms, adjusting HVAC systems
 and turning on exhaust fans in rooms that have them. If you would like to make a
 contribution to your school, please speak with your Principal about which types of
 donations would be most welcome.

Key Information

- An important part of ACT public schools return to on campus learning in term 4, 2021 is to ensure that there is proper ventilation in line with Health advice for managing COVID-19.
- It's important to note that ventilation is part of the broader suite of controls to reduce the risk of COVID-19 transmission in school settings including vaccination, physical distancing, good hygiene, cleaning and mask use, and should not be considered in isolation of other mitigation strategies
- The CHO, AHPPC, World Health Organisation and Safe Work Australia recommend ensuring fresh air ventilation is optimised in all settings, including through adjusting mechanical systems to increase fresh (external) air supply and reduce air recirculation, and use of natural ventilation such as opening windows and doors.
- Education Directorate has developed an Indoor Air Quality (IAQ) framework to assess the IAQ of all public schools commencing with ACT public colleges.

- All public school learning areas have been assessed under the IAQ framework with immediate actions implemented to optimise fresh air flow. There are 3500 learning areas in public schools in the ACT (including approx. 3000 classrooms).
- Every school has had an Indoor Air Quality Plan (see example at end of brief)
 completed for the return to on-campus learning this includes a list of actions
 already undertaken by the Directorate (including increasing fresh air ventilation via
 HVAC systems) and actions for schools to undertake each day (including opening
 windows to promote natural ventilation and turning on exhaust fans). These school
 actions will be carried out by non-teaching staff like our Building Service Officers.
- Site specific IAQ plans were provided to all ACT public colleges on 1 October 2021.
- Site specific IAQ plans were provided to all ACT public schools on 22 October 2021.
- From this work, the Education Directorate is confident that fresh air flow can be increased in all public school classrooms to improve ventilation.
- Cooler classroom temperatures during cool weather and warmer classroom temperatures during hotter weather are expected to result from increasing fresh air to learning environments.
- Higher energy bills are anticipated to result from the increase in fresh air as a greater volume of air needs to be heated or cooled.
- The Directorate is investigating technologies to improve air quality in classrooms including modern ventilation systems for toilets and bathrooms and air purification systems and securing the supply of these where appropriate.
- The Directorate is monitoring air quality in learning spaces to further refine the strategy to provide the best ventilation for ACT public schools including pre-schools.
- \$2.6 million of additional funding has been allocated to undertake short term actions across the public school portfolio to maximise fresh air in learning spaces.

Background Information

- ACT public schools are very well placed as there has been an extensive program of work underway to improve school ventilation since the 2019-2020 bushfires.
- The Education Directorate has been progressively upgrading building controls in 65 schools in order to have better control of the air intake sources for the Heating, Ventilation and Cooling (HVAC) systems.
- Many schools have building controls with CO₂ sensors which provides a proxy for ventilation in a room. CO₂ monitoring will commence once students and staff have fully returned on-site in Term 4.
- In 2018, the Education Directorate commenced a program of installing CO₂ sensors in schools. To date, more than 200 CO₂ sensors with remote monitoring and management systems have been installed across 35 public schools. An additional 80 CO₂ sensors have been orderd and are being installed at approximately 30 ACT public schools with suitable building control systems over the coming weeks. This will mean 73 per cent (65 of 89) schools will soon have CO₂ sensors to the monitor and manage indoor air quality.

- Not all classrooms are connected to large HVAC systems with CO₂ sensors, however these rooms typically have external natural ventilation and split system air conditioning units so that fresh air can be introduced and air flow maintained.
- Longer term, the Directorate will look to introduce additional mechanical ventilation in spaces that require it. This may include installation of new building control/management systems with CO₂ sensors that can remotely control HVAC systems and windows as well as installing supplemental ventilation such as modern exhaust fans in bathrooms and toilets.

	Canberra High School Indoor Air Quality Plan
Background:	As part of the return to on campus learning in Term 4 2021, ACT Health has advised that schools optimise fresh air circulation as one of the controls to reduce the risk of COVID-19 transmission in schools.
	The risk of COVID-19 transmission is higher in crowded and poorly ventilated spaces where people spend long periods of time together in close proximity. Good ventilation is one part of a suite of controls to minimise transmission in schools, like vaccination, physical distancing, student cohorting, good hygiene, cleaning and mask use.
	This Plan identifies actions that have been undertaken at your school by the Education Directorate and provides additional measures for the school to undertake to optimise the fresh air ventilation in the school in Term 4.
Health Advice:	The Chief Health Officer, the <u>Australian Health Protection Principal</u> <u>Committee</u> , <u>World Health Organisation</u> and <u>Safe Work Australia</u> all recommend good indoor air quality to reduce the chance of COVID-19 transmission.
Advice:	The ventilation systems at Canberra High School have now been assessed by the Directorate in accordance with the WHO guidance.
	Fresh air ventilation will be achieved through a mix of natural (opening windows and doors) and mechanical (cooling and ventilation systems).
	The settings for the Heating, Ventilation and Air Conditioning systems have been reset to achieve good fresh air supply and should not be altered by the school.
	Increasing the fresh air to classrooms may increase energy costs. Classrooms are also likely to experience lower room temperatures during cooler weather and higher room temperatures in warmer weather.
	Learning and teaching spaces with fresh air ventilation from either natural or mechanical systems meet the COVID-19 Health Advice. The school is to prioritise the use of these spaces for indoor teaching and learning along with outdoor spaces.
Daily actions	Additional daily measures the school will undertake include:
to be undertaken by the school in Term 4:	 Opening windows and doors in teaching spaces and other shared spaces of the school to supplement fresh air. Windows above ground level are to be opened only where window restriction is in place to ensure student safety. In line with the National Construction Code, window opening is to be 125mm or less.
	Improving air circulation through use of ceiling fans and split system air- conditioning units, only when windows are open.
	 Ensure bathroom, kitchen and any other exhaust fans are on and operating at full capacity while the school or program is operating and for some time before and after occupancy.

Actions undertaken: The following actions have been undertaken by the Directorate and its service providers to increase fresh air ventilation in the indoor teaching and learning spaces at the school: • air handling units have been programmed to supply additional fresh air via the mechanical ventilation systems • evaporative cooling in the school will provide full fresh air when operating in either cooling or fan mode. When not in operation, fresh air is to be provided by opening windows • contractors will continue work to audit and enhance the operation of the ventilation systems. For further advice, schools can contact their ICW Network Officer or email

ACT.Education@act.gov.au

Support or

further advice:

From: Simmons, Jane

Sent: Tuesday, 2 November 2021 6:26 PM **To:** DDGEDUoffice <DDGEDUoffice@act.gov.au>

Cc: Doherty, Sarah <Sarah.Doherty@act.gov.au>; EDU Cabinet Liaison Officer <EDUCabinet@act.gov.au> **Subject:** RE: FOR URGENT CLEARANCE: COVID-19 Hearing Preparation Session - Follow up/Actions - 01.10

Ventilation in Schools in response to COVID-19

Accept track changes and approved

Jane

From: Clinch, Jolene < Jolene. Clinch@act.gov.au > On Behalf Of DDGEDUoffice

Sent: Tuesday, 2 November 2021 6:12 PM

To: Simmons, Jane < <u>Jane.Simmons@act.gov.au</u>>

Cc: DDGEDUoffice < <u>DDGEDUoffice@act.gov.au</u>>; Doherty, Sarah < <u>Sarah.Doherty@act.gov.au</u>>; EDU Cabinet Liaison

Officer <EDUCabinet@act.gov.au>

Subject: FW: FOR URGENT CLEARANCE: COVID-19 Hearing Preparation Session - Follow up/Actions - 01.10

Ventilation in Schools in response to COVID-19

Importance: High

UNOFFICIAL

Hi Jane

Please see attached Ventilation brief for your clearance.

Thank you Jolene

From: Pilicic, Courtney < Courtney.Pilicic@act.gov.au On Behalf Of EDU, EGMBSG

Sent: Tuesday, 2 November 2021 5:39 PM

To: DDGEDUoffice < DDGEDUoffice@act.gov.au >

Cc: EDU, EGMBSG <EGMBSG.EDU@act.gov.au>; EDU Cabinet Liaison Officer <EDUCabinet@act.gov.au>

Subject: FOR URGENT CLEARANCE: COVID-19 Hearing Preparation Session - Follow up/Actions - 01.10 Ventilation in

Schools in response to COVID-19

Importance: High

UNOFFICIAL

Good afternoon DDG Office,

Please see attached TRIM link for DDG's urgent clearance, approved by EGMBSG David Matthews.

Kind regards, Courtney

Courtney Pilicic | Executive Support Officer to David Matthews

Phone: 6207 8330 | Email: courtney.pilicic@act.gov.au

Office of the Executive Group Manager | Business Services | Education | ACT Government

220 London Circuit, Canberra City ACT 2612 | GPO Box 158 Canberra ACT 2601

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From: Pilicic, Courtney < Courtney. Pilicic@act.gov.au > On Behalf Of EDU, EGMBSG

Sent: Tuesday, 2 November 2021 5:01 PM

To: EDU Cabinet Liaison Officer < EDUCabinet@act.gov.au >

Cc: EDU, EGMBSG < EGMBSG.EDU@act.gov.au >; ICW EBM Office < ICWEBMOffice@act.gov.au >

Subject: FAA CLEARED: COVID-19 Hearing Preparation Session - Follow up/Actions - 01.10 Ventilation in Schools in

response to COVID-19

UNOFFICIAL

Good afternoon CLO,

Please see attached TRIM link for appropriate action, updates approved by EGMBSG David Matthews.

Kind regards, Courtney

Courtney Pilicic | Executive Support Officer to David Matthews

Phone: 6207 8330 | Email: courtney.pilicic@act.gov.au
Office of the Executive Group Manager | Business Services | Education | ACT Government 220 London Circuit, Canberra City ACT 2612 | GPO Box 158 Canberra ACT 2601

www.education.act.gov.au | Facebook | Twitter | Pinterest | LinkedIn | Google+

From: Matthews, David < <u>David.Matthews@act.gov.au</u>>

Sent: Tuesday, 2 November 2021 1:39 PM **To:** EDU, EGMBSG < <u>EGMBSG.EDU@act.gov.au</u>>

Subject: FW: FOR CLEARANCE: COVID-19 Hearing Preparation Session - Follow up/Actions - 01.10 Ventilation in

Schools in response to COVID-19

UNOFFICIAL

Approved, with thanks. Can I also get a copy of the Indoor Air Quality (IAQ) framework.

Dave Matthews EGM BSG

From: Martinez, Catherine <Catherine.Martinez@act.gov.au> On Behalf Of EDU, EGMBSG

Sent: Tuesday, 2 November 2021 10:37 AM

To: Matthews, David <<u>David.Matthews@act.gov.au</u>> **Cc:** EDU, EGMBSG <<u>EGMBSG.EDU@act.gov.au</u>>

Subject: FOR CLEARANCE: COVID-19 Hearing Preparation Session - Follow up/Actions - 01.10 Ventilation	in Schools
in response to COVID-19	

UNOFFICIAL

UNOFFICIAL

Good morning David

Please find attached updated brief for you clearance as per below action from prep session yesterday.

Regards Catherine

From: Parkinson, Andrew < Andrew. Parkinson@act.gov.au>

Sent: Tuesday, 2 November 2021 9:06 AM **To:** EDU, EGMBSG < <u>EGMBSG.EDU@act.gov.au</u>>

Cc: ICW EBM Office < ICWEBMOffice@act.gov.au >; EDU Cabinet Liaison Officer < EDUCabinet@act.gov.au >

Subject: Fw: COVID-19 Hearing Preparation Session - Follow up/Actions

UNOFFICIAL

I've updated the ventilation brief 1.10 as per below for David to clear

Andrew Parkinson | Executive Branch Manager

Infrastructure & Capital Works | Education Directorate | ACT Government

Phone 02 6205 4593 | Mobile 0478 301 085

220 London Circuit, Civic | www.act.gov.au

Dhawura nguna, dhawura Ngunnawal

From: Nott, Georgia < Georgia.Nott@act.gov.au> on behalf of EDU Cabinet Liaison Officer < EDUCabinet@act.gov.au>

Sent: Monday, 1 November 2021 14:31

To: Haire, Katy < Katy.Haire@act.gov.au; Simmons, Jane Jane.Simmons@act.gov.au; Efthymiades, Deb Lebesthymiades@act.gov.au; Matthews, David David.Matthews@act.gov.au; McMahon, Kate

<Kate.McMahon@act.gov.au>; Huxley, Mark <Mark.Huxley@act.gov.au>; Moysey, Sean

<<u>Sean.Moysey@act.gov.au</u>>; Parkinson, Andrew <<u>Andrew.Parkinson@act.gov.au</u>>; Allars, Alex

 $<\!\!\underline{Alex.Allars@act.gov.au}\!\!>; Gotts, Robert <\!\!\underline{Robert.Gotts@act.gov.au}\!\!>; Moore, Nicole <\!\underline{Nicole.Moore@act.gov.au}\!\!>;$

Le, Thao < Thao.Le@act.gov.au >

Cc: Taber, Emma < Emma. Taber@act.gov.au>; Page, Vicki < Vicki. Page@act.gov.au>; Short, Paul

<Paul.Short@act.gov.au>; EDU Cabinet Liaison Officer <EDUCabinet@act.gov.au>

Subject: COVID-19 Hearing Preparation Session - Follow up/Actions

Good afternoon,

Just touching base to summarise the actions following this morning's prep session. Please action as follows:

Ventilation Brief to be updated to reflect HEPA filter language/donations

@McMahon, Kate – Update attendance data and information regarding 'learning impact' in Brief 1.05 – Return for

@Allars, Alex – Redeployment – to be added to mand vaccination. Include information from updated FAQ's.

@Moysey, Sean – New executive summary on Viability of ECEC – template provided to Sean.

As agreed, <u>updated information is due back to EDUCabinet@act.gov.au by 11am tomorrow</u>, noting the final mandatory vaccination statistics will be provided to David prior to the hearing on Thursday.

Kind regards -

Georgia Nott | Assembly Liaison Officer | Ministerial & Corporate Reporting

Phone: +61 2 620 77111 | Email: georgia.nott@act.gov.au

 ${\bf Communications, Engagement\ and\ Government\ Support\ |\ Education\ |\ ACT\ Government}$

GPO Box 158 Canberra ACT 2601

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I acknowledge the traditional custodians of the lands and waters where we live and work, and pay my respects to elders past, present, and future.



COMMITTEE HEARING BRIEF

Portfolio/s: Education and Youth Affairs

VENTILATION IN SCHOOLS

Talking Points

- Improving air quality in ACT public schools was prioritised ahead of students returning to on campus learning in term 4.
- All learning spaces across the school network have been checked (about 3500) to ensure adequate ventilation.
- Every school has its own Indoor Air Quality Plan which lists actions already
 undertaken by the Directorate (e.g. HVAC systems change) and actions for schools to
 undertake each day to improve air quality. These Indoor Air Quality Plans can be
 found on each school's website.
- Ventilation is one component of a multilayered approach that has been implemented to prevent transmission of COVID-19 in schools.
- The routine use of portable HEPA filters and portable carbon dioxide (CO2) monitors
 across all ACT schools is not supported at this time, as the evidence for the
 additional public health benefit of these units over other public health measures and
 maximising fresh air is currently limited.
- We will continue to be guided by ACT Health and AHPPC advice and the evolving evidence on the specific benefit of these devices in addition to other public health measures in a school setting.
- We appreciate the generosity of school communities in offering air purification units or fundraising for them. These units however, are not currently part of our air quality and ventilation plans for ACT public schools.
- In line with expert advice, we are maximising ventilation by opening windows in classrooms, adjusting HVAC systems and turning on exhaust fans in rooms that have them. The message to the community from schools is, If you would like to make a contribution to your school, please speak with your Principal about which types of donations would be most welcome.

Key Information

- An important part of ACT public schools return to on campus learning in term 4, 2021 is to ensure that there is proper ventilation in line with Health advice for managing COVID-19.
- It's important to note that ventilation is part of the broader suite of controls to reduce the risk of COVID-19 transmission in school settings including vaccination, physical distancing, good hygiene, cleaning and mask use, and should not be considered in isolation of other mitigation strategies
- The CHO, AHPPC, World Health Organisation and Safe Work Australia recommend ensuring fresh air ventilation is optimised in all settings, including through adjusting mechanical systems to increase fresh (external) air supply and reduce air recirculation, and use of natural ventilation such as opening windows and doors.

- The Education Directorate has developed an Indoor Air Quality (IAQ) framework to assess the IAQ of all public schools commencing with ACT public colleges.
- All public school learning areas have been assessed under the IAQ framework with immediate actions implemented to optimise fresh air flow. There are 3500 learning areas in public schools in the ACT (including approx. 3000 classrooms).
- Every school has had an Indoor Air Quality Plan (see example at end of brief)
 completed for the return to on-campus learning this includes a list of actions
 already undertaken by the Directorate (including increasing fresh air ventilation via
 HVAC systems) and actions for schools to undertake each day (including opening
 windows to promote natural ventilation and turning on exhaust fans). These school
 actions will be carried out by non-teaching staff like our Building Service Officers.
- Site specific IAQ plans were provided to all ACT public colleges on 1 October 2021.
- Site specific IAQ plans were provided to all ACT public schools on 22 October 2021.
- From this work, the Education Directorate is confident that fresh air flow can be increased in all public school classrooms to improve ventilation.
- Cooler classroom temperatures during cool weather and warmer classroom temperatures during hotter weather are expected to result from increasing fresh air to learning environments.
- Higher energy bills are anticipated to result from the increase in fresh air as a greater volume of air needs to be heated or cooled.
- The Directorate is investigating technologies to improve air quality in classrooms including modern ventilation systems for toilets and bathrooms and air purification systems and securing the supply of these where appropriate.
- The Directorate is monitoring air quality in learning spaces to further refine the strategy to provide the best ventilation for ACT public schools including pre-schools.
- \$2.6 million of additional funding has been allocated to undertake short term actions across the public school portfolio to maximise fresh air in learning spaces.

Background Information

- ACT public schools are very well placed as there has been an extensive program of work underway to improve school ventilation since the 2019-2020 bushfires.
- The Education Directorate has been progressively upgrading building controls in 65 schools in order to have better control of the air intake sources for the Heating, Ventilation and Cooling (HVAC) systems.
- Many schools have building controls with CO₂ sensors which provides a proxy for ventilation in a room. CO₂ monitoring will commence once students and staff have fully returned on-site in Term 4.
- In 2018, the Education Directorate commenced a program of installing CO₂ sensors in schools. To date, more than 200 CO₂ sensors with remote monitoring and management systems have been installed across 35 public schools. An additional 80 CO₂ sensors have been orderd and are being installed at approximately 30 ACT public schools with suitable building control systems over the coming weeks. This will

- mean 73 per cent (65 of 89) schools will soon have CO₂ sensors to the monitor and manage indoor air quality.
- Not all classrooms are connected to large HVAC systems with CO₂ sensors, however these rooms typically have external natural ventilation and split system air conditioning units so that fresh air can be introduced and air flow maintained.
- Longer term, the Directorate will look to introduce additional mechanical ventilation in spaces that require it. This may include installation of new building control/management systems with CO₂ sensors that can remotely control HVAC systems and windows as well as installing supplemental ventilation such as modern exhaust fans in bathrooms and toilets.

	Canberra High School Indoor Air Quality Plan
Background:	As part of the return to on campus learning in Term 4 2021, ACT Health has advised that schools optimise fresh air circulation as one of the controls to reduce the risk of COVID-19 transmission in schools.
	The risk of COVID-19 transmission is higher in crowded and poorly ventilated spaces where people spend long periods of time together in close proximity. Good ventilation is one part of a suite of controls to minimise transmission in schools, like vaccination, physical distancing, student cohorting, good hygiene, cleaning and mask use.
	This Plan identifies actions that have been undertaken at your school by the Education Directorate and provides additional measures for the school to undertake to optimise the fresh air ventilation in the school in Term 4.
Health Advice:	The Chief Health Officer, the <u>Australian Health Protection Principal</u> <u>Committee</u> , <u>World Health Organisation</u> and <u>Safe Work Australia</u> all recommend good indoor air quality to reduce the chance of COVID-19 transmission.
Advice:	The ventilation systems at Canberra High School have now been assessed by the Directorate in accordance with the WHO guidance.
	Fresh air ventilation will be achieved through a mix of natural (opening windows and doors) and mechanical (cooling and ventilation systems).
	The settings for the Heating, Ventilation and Air Conditioning systems have been reset to achieve good fresh air supply and should not be altered by the school.
	Increasing the fresh air to classrooms may increase energy costs. Classrooms are also likely to experience lower room temperatures during cooler weather and higher room temperatures in warmer weather.
	Learning and teaching spaces with fresh air ventilation from either natural or mechanical systems meet the COVID-19 Health Advice. The school is to prioritise the use of these spaces for indoor teaching and learning along with outdoor spaces.
Daily actions	Additional daily measures the school will undertake include:
to be undertaken by the school in Term 4:	Opening windows and doors in teaching spaces and other shared spaces of the school to supplement fresh air. Windows above ground level are to be opened only where window restriction is in place to ensure student safety. In line with the National Construction Code, window opening is to be 125mm or less.
	Improving air circulation through use of ceiling fans and split system air- conditioning units, only when windows are open.
	 Ensure bathroom, kitchen and any other exhaust fans are on and operating at full capacity while the school or program is operating and for some time before and after occupancy.

Actions undertaken: The following actions have been undertaken by the Directorate and its service providers to increase fresh air ventilation in the indoor teaching and learning spaces at the school: air handling units have been programmed to supply additional fresh air via the mechanical ventilation systems evaporative cooling in the school will provide full fresh air when operating in either cooling or fan mode. When not in operation, fresh air is to be provided by opening windows contractors will continue work to audit and enhance the operation of the ventilation systems. For further advice, schools can contact their ICW Network Officer or email ACT.Education@act.gov.au

further advice:



Portfolio/s: Education and Youth Affairs

VENTILATION IN SCHOOLS

Talking Points

- Improving air quality in ACT public schools was prioritised ahead of students returning to on campus learning in term 4.
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- Ventilation is one component of a multilayered approach that has been implemented to prevent transmission of COVID-19 in schools.
- The routine use of portable HEPA filters and portable carbon dioxide (CO2) monitors across all ACT schools is not supported at this time, as the evidence for the additional public health benefit of these units over other public health measures and maximising fresh air is currently limited.
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- We appreciate the generosity of school communities in offering air purification units or fundraising for them. These units however, are not currently part of our air quality and ventilation plans for ACT public schools.
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Key Information

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- The CHO, AHPPC, World Health Organisation and Safe Work Australia recommend ensuring fresh air ventilation is optimised in all settings, including through adjusting

Cleared as complete and accurate: 08/11/2021

Cleared for public release by: Deputy Director-General Contact Officer name: Andrew Parkinson

Lead Directorate: Education 1 of 5
TRIM Ref: SUB21/7406



mechanical systems to increase fresh (external) air supply and reduce air recirculation, and use of natural ventilation such as opening windows and doors.

- The Education Directorate has developed an Indoor Air Quality (IAQ) framework to assess the IAQ of all public schools commencing with ACT public colleges.
- All public school learning areas have been assessed under the IAQ framework with immediate actions implemented to optimise fresh air flow. There are 3500 learning areas in public schools in the ACT (including approx. 3000 classrooms).
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- From this work, the Education Directorate is confident that fresh air flow can be increased in all public school classrooms to improve ventilation.
- Cooler classroom temperatures during cool weather and warmer classroom temperatures during hotter weather are expected to result from increasing fresh air to learning environments.
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Background Information

- ACT public schools are very well placed as there has been an extensive program of work underway to improve school ventilation since the 2019-2020 bushfires.
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Cleared as complete and accurate: 08/11/2021

Cleared for public release by: Deputy Director-General Contact Officer name: Andrew Parkinson

Lead Directorate: Education 2 of 5
TRIM Ref: SUB21/7406



- In 2018, the Education Directorate commenced a program of installing CO₂ sensors in schools. To date, more than 200 CO₂ sensors with remote monitoring and management systems have been installed across 35 public schools. An additional 80 CO₂ sensors have been orderd and are being installed at approximately 30 ACT public schools with suitable building control systems over the coming weeks. This will mean 73 per cent (65 of 89) schools will soon have CO₂ sensors to the monitor and manage indoor air quality.
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- Longer term, the Directorate will look to introduce additional mechanical ventilation in spaces that require it. This may include installation of new building control/management systems with CO₂ sensors that can remotely control HVAC systems and windows as well as installing supplemental ventilation such as modern exhaust fans in bathrooms and toilets.

TRIM Ref:



Canberra High School Indoor Air Quality Plan	
Background:	As part of the return to on campus learning in Term 4 2021, ACT Health has advised that schools optimise fresh air circulation as one of the controls to reduce the risk of COVID-19 transmission in schools.
	The risk of COVID-19 transmission is higher in crowded and poorly ventilated spaces where people spend long periods of time together in close proximity. Good ventilation is one part of a suite of controls to minimise transmission in schools, like vaccination, physical distancing, student cohorting, good hygiene, cleaning and mask use.
	This Plan identifies actions that have been undertaken at your school by the Education Directorate and provides additional measures for the school to undertake to optimise the fresh air ventilation in the school in Term 4.
Health Advice:	The Chief Health Officer, the <u>Australian Health Protection Principal</u> <u>Committee</u> , <u>World Health Organisation</u> and <u>Safe Work Australia</u> all recommend good indoor air quality to reduce the chance of COVID-19 transmission.
Advice:	The ventilation systems at Canberra High School have now been assessed by the Directorate in accordance with the WHO guidance.
	Fresh air ventilation will be achieved through a mix of natural (opening windows and doors) and mechanical (cooling and ventilation systems).
	The settings for the Heating, Ventilation and Air Conditioning systems have been reset to achieve good fresh air supply and should not be altered by the school.
	Increasing the fresh air to classrooms may increase energy costs. Classrooms are also likely to experience lower room temperatures during cooler weather and higher room temperatures in warmer weather.
	Learning and teaching spaces with fresh air ventilation from either natural or mechanical systems meet the COVID-19 Health Advice. The school is to prioritise the use of these spaces for indoor teaching and learning along with outdoor spaces.

Cleared as complete and accurate: 08/11/2021
Cleared for public release by: Deputy Director-General

Contact Officer name: Lead Directorate:

TRIM Ref:

Andrew Parkinson Education SUB21/7406



Daily actions to be undertaken by the school in Term 4:	 Additional daily measures the school will undertake include: Opening windows and doors in teaching spaces and other shared spaces of the school to supplement fresh air. Windows above ground level are to be opened only where window restriction is in place to ensure student safety. In line with the National Construction Code, window opening is to be 125mm or less. Improving air circulation through use of ceiling fans and split system air-conditioning units, only when windows are open. Ensure bathroom, kitchen and any other exhaust fans are on and operating at full capacity while the school or program is operating and for some time before and after occupancy.
Actions undertaken:	The following actions have been undertaken by the Directorate and its service providers to increase fresh air ventilation in the indoor teaching and learning spaces at the school: • air handling units have been programmed to supply additional fresh air via the mechanical ventilation systems • evaporative cooling in the school will provide full fresh air when operating in either cooling or fan mode. When not in operation, fresh air is to be provided by opening windows • contractors will continue work to audit and enhance the operation of the ventilation systems.
Support or further advice:	For further advice, schools can contact their ICW Network Officer or email ACT.Education@act.gov.au

Lead Directorate:

TRIM Ref:

08/11/2021

Yapp, Phillip

From: Leechman, Ellie on behalf of ICW EBM Office
Sent: Monday, 8 November 2021 3:43 PM

To: #EDU, Infrastructure and Capital Works Branch

Cc:ICW EBM OfficeSubject:Ventilation presentationAttachments:ICW Toolbox Ventilation.pdf

OFFICIAL

Good Afternoon Everyone, Here is the copy of PDF version of the Ventilation presentation Andrew talk about on Friday

Thanks Ellie

Ellie Leechman

Admininistration Officer | EBM Office Infrastructure and Capital Works Education | ACT Government

Email: ellie.leechman@act.gov.au | Phone: 6205 9843

Level 4 220 London Circuit Canberra City ACT 2601 GPO Box 158 Canberra ACT 2601

Ventilation in schools

ICW Toolbox 5 November 2021

Ventilation key messages

- Improving air quality in ACT public schools was prioritised ahead of students returning to on campus learning in term 4.
- All learning spaces across the school network have been checked (about 3500) to ensure adequate ventilation.
- Every school has its own Indoor Air Quality Plan which lists actions already undertaken by the Directorate (e.g. HVAC systems change) and actions for schools to undertake each day to improve air quality. These Indoor Air Quality Plans can be found on each school's website.
- Ventilation is one component of a multilayered approach that has been implemented to prevent transmission of COVID-19 in schools.

About HEPA filters...

- In line with expert advice, we are maximising ventilation by opening windows in classrooms, adjusting HVAC systems and turning on exhaust fans in rooms that have them.
- The routine use of portable HEPA filters and portable carbon dioxide (CO2) monitors
 across all ACT schools is not supported at this time, as the evidence for the additional
 public health benefit of these units over other public health measures and
 maximising fresh air is currently limited.
- We will continue to be guided by ACT Health and AHPPC advice and the evolving evidence on the specific benefit of these devices in addition to other public health measures in a school setting

EDU response

- The Education Directorate has developed an Indoor Air Quality (IAQ) framework to assess the IAQ of all public schools commencing with ACT public colleges.
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- Every school had an Indoor Air Quality Plan completed for the return to on-campus learning this includes a list of actions already undertaken by the Directorate (including increasing fresh air ventilation via HVAC systems) and actions for schools to undertake each day (including opening windows to promote natural ventilation and turning on exhaust fans).
- From this work, the Education Directorate is confident that fresh air flow can be increased in all public school classrooms to improve ventilation.



COVID-19 Pathway Out of Lock Down

Publication date: 19/10/2021

Example IAQP

Curtin Primary School and North and South Preschools Indoor Air Quality Plan	
Background:	As part of the return to on campus learning in Term 4 2021, ACT Health has advised that schools optimise fresh air circulation as one of the controls to reduce the risk of COVID-19 transmission in schools.
	The risk of COVID-19 transmission is higher in crowded and poorly ventilated spaces where people spend long periods of time together in close proximity. Good ventilation is one part of a suite of controls to minimise transmission in schools, like vaccination, physical distancing, student cohorting, good hygiene, cleaning and mask use.
	This Plan identifies actions that have been undertaken at your school by the Education Directorate and provides additional measures for the school to undertake to optimise the fresh air ventilation in the school in Term 4.
Health Advice:	The Chief Health Officer, the <u>Australian Health Protection Principal Committee</u> , <u>World Health Organisation</u> and <u>Safe Work Australia</u> all recommend good indoor air quality to reduce the chance of COVID-19 transmission.
Advice:	The ventilation systems at Curtin Primary School and the North and South Preschools have now been assessed by the Directorate in accordance with the WHO guidance.
	Fresh air ventilation will be achieved through a mix of natural (opening windows and doors) and mechanical (cooling and ventilation systems).
	The settings for the Heating, Ventilation and Air Conditioning systems have been reset to achieve good fresh air supply and should not be altered by the school.
	Increasing the fresh air to classrooms may increase energy costs. Classrooms are also likely to experience lower room temperatures during cooler weather and higher room temperatures in warmer weather.
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	Improving air circulation through use of ceiling fans and split system air-conditioning units, only when windows are open.
	Ensure bathroom, kitchen and any other exhaust fans are on and operating at full capacity while the school or program is operating and for some time before and after occupancy.

Page 1 of 2

Actions undertaken:	The following actions have been undertaken by the Directorate and its service providers to increase fresh air ventilation in the indoor teaching and learning spaces at the school:
	 ventilation systems will commence two hours before school starts and continue for two hours after the last expected occupancy
	 evaporative cooling in the BER will provide full freshair when operating in either cooling or fan mode. When not in operation, freshair is to be provided by opening additional windows
	 contractors will continue work to audit and enhance the operation of the ventilation systems
	 contractors will continue window maintenance and replacement to enhance natural ventilation.
Support or further advice:	For further advice, schools can contact their ICW Network Officer or email ACT.Education@act.gov.au

Page 2 of 2



Reference documents

swa.gov.au/coronavirus

Improving ventilation in indoor workplaces: COVID-19

Ensuring heating, ventilation and air conditioning (HVAC) systems are well-maintained and operating properly is important for indoor workplaces to manage the risk of COVID-19 transmission. This includes any risks associated with the HVAC system being restarted after a period of shutdown.

These three steps will help to reduce the risk of COVID-19 transmission and improve ventilation in indoor settings.

To minimise the risk of COVID-19 at your workplace, you should ensure that all reasonably practicable COVID-19 control measures are followed including physical distancing, good hygiene, regular cleaning and maintenance, and that your workers do not attend work if they are unwell.

Some industries have specific directions that should be followed (for example, healthcare).

1. Ensure the HVAC system is

working properly

HVAC systems are an essential safety measure for most buildings. HVAC systems must always be maintained in accordance with the relevant national regulations to ensure ongoing building compliance, including during the COVID-19 pandemic.

If you do not directly control or manage a HVAC unit or system, you will need to liaise with the building owner or facilities manager to ensure the system is regularly inspected and maintained.

Before you allow your workers to resume work after a period of shutdown, you should confirm with the building owner or facilities manager that the correct start-up procedures and control settings are in place to reduce any risks associated with the HVAC system being restarted.

2. Take steps to improve ventilation for indoor workplaces

You should consider adjusting the settings of your HVAC system to help minimise the risk of COVID-19. This includes not recirculating the air or limiting the level of recirculation.

You can also organise for doors and windows to be opened to increase the intake of fresh air.

If you have exhaust fans in restrooms and other facilities, check they are functional and operating continuously and at full capacity when the building is occupied.

Exhaust should be directed outdoors and away from windows and air intake systems of your building and that of any surrounding buildings. Your building owner or facilities manager can assist you with checking and adjusting air flow at your workplace.

Fans and portable air cleaners or purifiers are safe to use in areas with one person. In areas with more than one person these should only be used where the air is not directly blowing from one person to another and where fresh air is available. If you use fans, air cleaners or purifiers, they need to be maintained and operated in accordance with the manufacturer's instructions.

3. Other things you can do

If you are still concerned about the ventilation in your indoor setting, for example if you are unable to adjust your air conditioning settings or allow fresh air into your workplace, you should consider limiting the number of people at the workplace, or within certain areas of the workplace.

Crowded and noisy places have a higher risk of generating and spreading respiratory droplets. To improve effective ventilation on a per person basis, you should, where possible:

- look at your workplace floorplan and adjust workstations to maintain physical distancing of at least 1.5 metres between workers
- stagger your workers' start, finish and break times
- relocate work tasks to different areas of the workplace, off-site or support workers to work from home, or
- provide teams their own dedicated meal areas or break facilities.

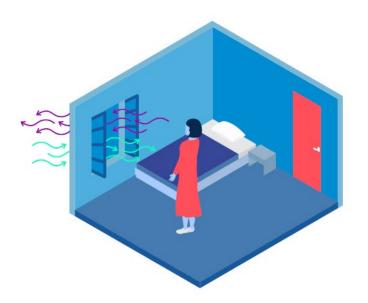
For more resources:

Visit the Safe Work Australia website swa.gov.au/coronavirus





Roadmap to improve and ensure good indoor ventilation in the context of COVID-19



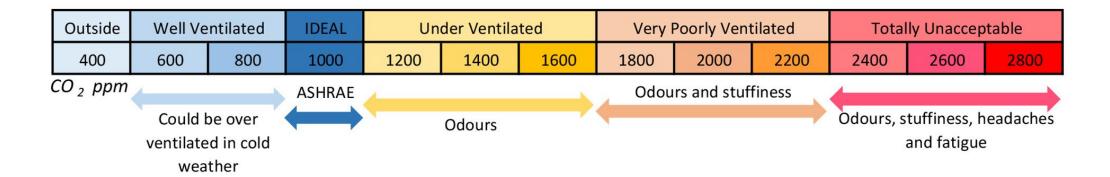
Natural & Mechanical Ventilation

- Natural = air flow via windows, doors and other openings
- Mechanical = air pushed into or out of a space by a system.
- Mechanical ventilation includes exhaust fans and ducted systems with external air supply

 Most split system air conditioning units don't have a ventilation component

How do we measure air flow?

- WHO recommends air flow of 10 litres / sec / person
- CO2 readings are a good proxy measurement



CO2 sensors

- In 2018, the Education Directorate commenced a program of installing CO2 sensors in schools.
- To date, more than 200 CO2 sensors with remote monitoring and management systems have been installed across 35 public schools.
- An additional 80 CO2 sensors have been ordered and are being installed at approximately 30 ACT public schools with suitable building control systems over the coming weeks. This will mean 73 per cent (65 of 89) schools will soon have CO2 sensors to the monitor and manage indoor air quality.

How do we achieve good air flow?

- Not all classrooms are connected to large HVAC systems with CO2 sensors, however these rooms typically have external natural ventilation and split system air conditioning units so that fresh air can be introduced and air flow maintained.
- Split systems can be used with windows open they are just not as efficient
- The 5% ventilation requirement:
 - an openable window or similar aperture is required to be at least 5% of the floor space in that particular area (can be one room or a combination of spaces.
 - in a room where there is no ceiling fan, the BCA states that you must achieve effective cross ventilation.

Short Term

- Opening windows and doors
- Tuning HVAC systems to introduce more fresh air

- Cooler classroom temperatures during cool weather and warmer classroom temperatures during hotter weather are expected to result from increasing fresh air to learning environments.
- Higher energy bills are anticipated to result from the increase in fresh air as a greater volume of air needs to be heated or cooled

Medium Term

- The Directorate is investigating technologies to improve air quality in classrooms including modern ventilation systems for toilets and bathrooms and air treatment systems
- New AC units with external air for preschools
- UVC treatment in some splits

Additional Funding in 21/22

- \$5.2M for works
- \$600K for maintenance of HVAC
- Extra \$ for school electricity costs

Longer Term

 Need to align standards, specifications & expectations to ensure fresh air is part of every ICW project. From:
To: Matthews, David
Cc: EDU, EGMBSG
Subject: RE: Dyson Purifiers
Date: Monday, 8 November 2021 3:46:26 PM
Attachments: image001.png
image002.png

CAUTION: This email originated from outside of the ACT Government. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Hi David, I'm well, thanks.

Thanks for the update. If the ACT Health position changes, and funding is a challenge, please let me know as is open to working with the ACT Government and Dyson to deliver a lease / funding solution via a Master lease.

Have a nice afternoon.

Best,

From: Matthews, David < David. Matthews@act.gov.au>

Sent: Friday, 5 November 2021 4:32 PM

To:

Cc: EDU, EGMBSG < EGMBSG. EDU@act.gov.au>

Subject: RE: Dyson Purifiers

 \triangle **EXTERNAL EMAIL:** Do not click links or open any attachments unless you trust the sender and know the content is safe. \triangle

Hi

Nice to hear from you and I hope you and your family are well. I'm back in the role and happy to be your point of contact.

At this stage the ACT health advice is not recommending the use of additional standalone purification devices as part of the overall suite of responses for the return to school arrangements.

We are however monitoring the situation closely and continue to be in contact with colleagues

interstate to learn from their experiences.

I will undertake to stay in touch as things evolve and thank you for reaching out.

Regards

David Matthews Executive Group Manager, Business Services Group Education Directorate, ACT Government

Email: david.matthews@act.gov.au

From:

Sent: Friday, 5 November 2021 3:06 PM

To: Matthews, David < David.Matthews@act.gov.au >

Subject: RE: Dyson Purifiers

CAUTION: This email originated from outside of the ACT Government. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Hi David,

I hope you are well.

I recently connected Dyson through to Meghan Oldfield to see if they could 'support with the return to a new learning environment'.

I was just wondering how those conversations went and if you need anything from ?

Kind regards,

From: Matthews, David < <u>David.Matthews@act.gov.au</u> > Sent: Thursday, 23 January 2020 7:03 PM
To: Subject: RE: Dyson Purifiers
UNCLASSIFIED For-Official-Use-Only
Thank you once again. I have spoken with and we are looking at confirming the details of the donation tomorrow.
I will stay in touch to advise on details over coming days.
We appreciate your warm and generous advocacy on behalf of public education in Canberra.
Regards David Matthews
From: Sent: Wednesday, 22 January 2020 12:03 PM To: Matthews, David < David. Matthews@act.gov.au > Subject: RE: Dyson Purifiers
Hi David, You're very welcome.
I'm really amazed that what started as a potential proposal, to help support the government deal with this significant challenge, has led to such an amazing offer by Dyson. If the Air Purifiers are a success and the Education Directorate is interested in considering a larger scale rollout of similar Air Purifiers, I would be more than happy to continue working on the leasing proposal with partner.
Kind regards,
From: Matthews, David < <u>David.Matthews@act.gov.au</u> > Sent: Tuesday, 21 January 2020 7:13 PM To:
Subject: Re: Dyson Purifiers
Thank you, very much appreciated. I'll be back in touch.
Regards David Matthews

Get Outlook for iOS

From:

Sent: Tuesday, January 21, 2020 6:18:49 PM

To: Matthews, David < <u>David.Matthews@act.gov.au</u>>

Subject: FW: Dyson Purifiers

Hi David,

Thanks again for reaching out.

As discussed, please see details below.

Kind regards,

From:

Sent: Tuesday, 21 January 2020 12:18 PM

To:

Subject: Dyson Purifiers

Hi Michael,

As discussed, we have 400 tower purifiers we would love to donate for schools in Canberra.

We are working hard to try and secure some more stock globally and I will keep you updated on our progress.

Below is the product we have available now;

https://shop.dyson.com.au/fans-and-heaters/purifiers/dyson-pure-cool-tower-white-310132-01

Look forward to hearing back from you on next steps.

Best regards,





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We can be contacted through our web site: commbank.com.au.

If you no longer wish to receive commercial electronic messages from us, please reply to this

e-mail by typing Unsubscribe in the subject line.

Yapp, Phillip

From: Yapp, Phillip

Sent: Wednesday, 10 November 2021 4:11 PM

To: Graham, Cathy

Subject: FW: APPROVED: IAQ PPM HRV systems (Stiebel Eltron)

Attachments: PPM - Stiebel Eltron Heat Recovery Ventilators Single Select.pdf; Quotation 10158588 ACT Education Directorate Quote 2.pdf; IAQ-PO-

 $HRV20 Units-Stiebel Eltron-General_Terms_and_Conditions_for_Purchase_Orders.pdf; IAQ-PO-HRV20 Units-Stiebel Eltron.pdf$

Hi Cathy

Quotation for \$197k purchase.

Phil Yapp | Assistant Director – Asset Strategies, Sustainability and Environment

Phone: +61 2 6207 9190 | M: 0435 655 176 | Email: phillip.yapp@act.gov.au Infrastructure and Capital Works | Education | ACT Government

Level 4 220 London Circuit | GPO Box 158 Canberra ACT 2601 | www.det.act.gov.au

From: Yapp, Phillip

Sent: Tuesday, 26 October 2021 12:03 PM **To:** Mitchell, BethL <BethL.Mitchell@act.gov.au>

Subject: FW: APPROVED: IAQ PPM HRV systems (Stiebel Eltron)

Hi Beth

Purchase Order and associated documentation for signing for purchase of twenty (20) HRV systems. I have put you as the purchaser and Andrew as the delegate for this larger one.

Delivery address is currently HBCTL, I've left a message with Grant to discuss whether 255 CBR could be a better option. Given the urgency in securing and shipment not likely until later in the year, I'm sure this can be managed.

G:\Infrastructure and Capital Works\Projects\2. Asset Audits\COVID-19 Audits and IAQ Plans\Work Program\Stiebel Eltron pruchase of twenty (20) HRV units\IAQ-PO-HRV20Units-StiebelEltron.pdf

Cheers

Phil

Phil Yapp | Assistant Director – Asset Strategies, Sustainability and Environment

Phone: +61 2 6207 9190 | M: 0435 655 176 | Email: <u>phillip.yapp@act.gov.au</u>

Infrastructure and Capital Works | Education | ACT Government

Level 4 220 London Circuit | GPO Box 158 Canberra ACT 2601 | www.det.act.gov.au

From: Stewart, Ell < Ell.Stewart@act.gov.au> On Behalf Of ICW EBM Office

Sent: Tuesday, 26 October 2021 9:47 AM

To: Mitchell, BethL < BethL.Mitchell@act.gov.au >; Yapp, Phillip < Phillip.Yapp@act.gov.au >

Cc: ICW EBM Office < < ICWEBMOffice@act.gov.au > Subject: APPROVED: IAQ PPM HRV systems

OFFICIAL

From: Parkinson, Andrew < Andrew. Parkinson@act.gov.au >

Sent: Monday, 25 October 2021 5:54 PM

To: ICW EBM Office < ICWEBMOffice@act.gov.au >

Subject: FW: FOR APPROVAL: IAQ PPM HRV systems

OFFICIAL

Approved – please trim

Andrew Parkinson | Executive Branch Manager
Infrastructure & Capital Works | Education Directorate | ACT Government
Phone 02 6205 4593 | Mobile 0478 301 085
220 London Circuit, Civic | www.act.gov.au

Dhawura nguna, dhawura Ngunnawal

From: Stewart, Ell < Ell.Stewart@act.gov.au > On Behalf Of ICW EBM Office

Sent: Monday, 25 October 2021 5:31 PM

To: Parkinson, Andrew <<u>Andrew.Parkinson@act.gov.au</u>>
Cc: ICW EBM Office <<u>ICWEBMOffice@act.gov.au</u>>
Subject: FOR APPROVAL: IAQ PPM HRV systems

OFFICIAL
1

Andrew, PPM for approval please

Thanks, Ell

From: Mitchell, BethL < BethL.Mitchell@act.gov.au>

Sent: Monday, 25 October 2021 5:09 PM
To: ICW EBM Office < ICWEBMOffice@act.gov.au >
Cc: Yapp, Phillip < Phillip.Yapp@act.gov.au >

Subject: IAQ PPM HRV systems

OFFICIAL

Hi Andrew,

Please find attached the supply and delivery ppm for the classroom scale HRV systems as discussed.

The units will be manufactured in Germany and shipped to Australia.

As outlined in the PPM, the units will be allocated on a priority basis once the Indoor air quality maps are finalised and we can identify the highest risk areas for this application. A significant side benefit will be the provision of additional internal comfort in classrooms that have only splits with no outdoor air as they systems will allow the doors and windows to be closed.

Cheers

Beth Mitchell | Director – Asset Strategies, Sustainability and Environment

Phone: +61 2 6207 8364 | Fax: +61 2 6205 9333 | Email: bethl.mitchell@act.gov.au Infrastructure and Capital Works | Education | ACT Government Level 4 220 London Circuit | GPO Box 158 Canberra ACT 2601 | www.det.act.gov.au

Procurement Plan Minute

PROCUREMENT OVERVIEW			
To Name of Project	Mr Andrew Parkinson Branch Manager Infrastructure and Capital Works Branch Purchase of twenty (20) Stiebel Eltron Heat Recovery Ventilators for classroom ventilation		
Purpose	To seek your approval to engage Stiebel Eltron (Aust) Pty Ltd to supply and deliver twenty (20) classroom ventilation units. This will allow for improved ventilation and monitoring capability to effectively manage COVID risk for return of on-campus learning, where there are limited opportunities to open windows or bring fresh air ventilation through the ventilation systems system.		
Estimated value (\$, excl GST)	\$197,840.50 including GST		
Timing/urgency	 The project is required as soon as possible to reduce the risk of transmission of COVID-19 in the school environment. The interim solution to manually set mechanical systems to increase ventilation or minimise the use of spaces is unsustainable. The systems can provide fresh air ventilation to classrooms with air conditioning systems that do not supply fresh air meaning that they will increase thermal comfort to these spaces during temperature extremes. 		
Tender Number	Not applicable		
Is Government Procurement Board sign off required?	No, as the estimated value of the procurement is below the monetary threshold for Government Procurement Board review (\$5,000,000.00).		
Is ACT Government Solicitor (ACTGS) consultation required?	Not applicable		
SME Opportunities Statement – Goods and Services only	Not applicable		
Objective or scope of works or services to be provided	Purchase of the heat recovery ventilation units will allow additional ventilation to be provided to selected classrooms identified as having inadequate ventilation as well as provide increased thermal comfort to these spaces during temperature extremes. Classrooms to be selected on a priority basis as identified through the HVAC IAQ audits currently underway.		
Туре	Supply and delivery.		

PROCUREMENT OVERVIEW		
Funding	COVID-19 ventilation works: Term 4 2021.	
Consultation (including pretender)	Infrastructure and Capital Works, Asset Strategies have consulted with the supplier and ACT Property Group as managers of the Education HVAC maintenance contracts have been consulted regarding expected performance outcomes, scope of work and timeframes required for safe return of college students on an ongoing basis.	

PROCUREMENT RISK		
Risk	•	Cost effective price of per unit providing 870 Litres/second freshair represents value vs current units on the market, which provide around 380 L/s for a similar price (the later product is insufficient for large classroom applications.
	•	The units have only just been approved for use in Australia through the electrical approval process. A delay in the approval of procurement risks missing out on the supply of any units which are expected to be in very high demand.
	•	The units are used extensively in Europe and are proven in the school environment
	•	Seeking alternate suppliers through a market process with incur significant lead times and may not yield product with equivalent capability at the same cost (see above)
	•	Units are relatively small size and can easily be installed by an HVAC contractor with minimal capital cost. Units can also be relocated easily with minimal impact on existing buildings.

PROCUREMENT METHODOLOGY		
Description of the procurement method to be used	"Single Select". The engagement of Stiebel Eltron Aust Pty Ltd will secure the supply of equipment that is known to be in high demand and is required to allow safe return of students in instances where ventilation from windows or HVAC is not easily achievable.	
Evaluation	The scope and quotation submitted by Stiebel Eltron Aust Pty Ltd has been assessed by ACT Property Group and ICW Asset Strategies and they have determined the proposal does provide Value for Money to the Territory.	
Is this suitable to be a Social Procurement?	No.	

EVALUATION TEAM			
Name	Phillip Yapp	Beth Mitchell	Grant Cusack
Position	Assistant Director, Sustainability	Director, Asset Strategies	Director, ACTPG Projects
Agency	Education Directorate	Education Directorate	ACT Property Group

EVALUATION TEAM		
Statement on	Evaluation team is comprised of staff with relevant experience in sustainability,	
team	asset management and HVAC technical skills. ACTPG provide ongoing management	
composition	of the HVAC contracts on ICW's behalf.	

CONTRACT MANAGEMENT		
Number of contracts One (1).		
Contract management	ICW – Asset Strategies	
Period of contract(s)	6 weeks.	

AUSTRALIAN FREE TRADE AGREEMENTS (FTAs)		
Australia-Chile FTA apply?	No, as the estimated value of the procurement is below the monetary threshold for the application of the tendering procedures mandated by the FTAs (\$551,000.00 for goods and services).	

AUSTRALIAN GOVERNMENT FUNDING		
Is there Australian Government funding attached to the procurement?	No.	

EXEMPTIONS		
Exemption	Exemption from the Quotation and Tender Threshold at Part 2, Section 6 of the <i>Government Procurement 2007</i> ("the Regulation") is sought. This exemption can be granted in accordance with Part 2, Section 10 of the Regulation, which states:	
	(1) The responsible Director-General for a territory entity may, in writing, exempt the entity from a requirement mentioned in section 6 or section 9 for a procurement proposal.	
	(2) However, the responsible Director-General may exempt the entity only if satisfied, on reasonable grounds, that the benefit of the exemption outweighs the benefit of compliance with the requirements	
	The Director-General has partially delegated this function to the Executive Branch Manager – Infrastructure and Capital Works, Education Directorate up to a value of up to \$200,000 including GST.	
Reason for Exemption	Engagement of Stiebel Eltron Aust Pty Ltd is requested for exemption based on:	
	 Urgent need to procure solutions to inadequate ventilation in some school classrooms. 	
	Stiebel Eltron are currently the only manufacturer producing heat recovery ventilation units at a large size suitable for classroom ventilation for 20-30 students.	

EXEMPTIONS		
	•	Understanding that units will be in high demand with schools returning across the country, supply of units will not be readily available.

AGENCYENDORSEMENT				
Name	Beth Mitchell	6207 8364		
Position	Director, Asset Strategies and Sustainability			
Signature		Date	25/10/2021	

DELEGATE APPROV	AL	
Name	Andrew Parkinson	
Position		
Statement		rement method.
Signature		

Stiebel Eltron (Aust) Pty Ltd 294 Salmon Street Port Melbourne VIC 3207 Australia ABN # 82 066 271 083



Customer Number 1130486
ACT Education Directorate
220 London Cct, AU
CANBERRA 2601

ACT Education Directorate 220 London Cct, AU CANBERRA ACT 2601

Quotation					
Original					
Number	10158588	-	ZAG		
Date	19.10.2021				
Contact					
E-Mail					
Reference Document Type	Quotation				
Reference Document	0010158586				
Date	19.10.2021				
Valid from	19.10.2021				
Valid to	31.12.2021				
Our Tax number	82066271083				

Page 1 of 2

Currency AUD

PLEASE NOTE

FOR ANY QUERIES IN RELATION TO THIS QUOTATION / ORDER, PLEASE CONTACT STIEBEL ELTRON REPRESENTATIVE BELOW:

ACT Mobile: Email:

Quote provided to Beth Mitchell Director Asset Strategies

Sustainability and Environment at ACT Education Directorate

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·	u	ш	u	Ц	ш	u	Ц	13	•

Terms of Delivery: Free Carrier Shipping conditions: Direct Delivery

Terms of payment Advance Payment

I erm	s of payment	Advance Payment		
Pos.			Item Detail	
100	Material:	204134	VRL-C 870 D Premium	
	Quantity:	5 PC	EAN: 401721204134	5
	Price:	Туре	Amount	Unit Value
		Net price	AUD per 1 P	C
200	Material:	204132	VRL-C 870 G Premium	
	Quantity:	15 PC	EAN: 401721204132	1
	Price:	Туре	Amount	Unit Value
		Net price	AUD per 1 P	C

Stiebel Eltron (Aust) Pty Ltd 294 Salmon Street Port Melbourne VIC 3207 Australia ABN # 82 066 271 083



Document 10158588

Date 19.10.2021

Page 2 of 2

300	Material:	204144	ZVRL-C CU		
	Quantity:	20 PC	EAN: 401721204	1444	
	Price:	Туре	Amount	Unit	Value
		Net price	AUD per	1 PC	

Total net		179,855.00
Goods / Services Tax	10.000 %	17,985.50

Final amount 197,840.50

Weights - Volume:

Net weight: 2,437 KG Gross weight: 2,865 KG Volume: 28,389.375 CD3

NOTE

DELIVERY / FREIGHT

MAY INCUR ADDITIONAL CHARGES

NOTE

ONSITE COMMISSIONING NOT INCLUDED

NOTE

LEAD TIME

Please note that the products on this quote are required to be ordered from Germany. Due to manufacture and shipping, we advise approximately 3-4 months lead time from the time an order is placed with STIEBEL ELTRON.



General Terms and Conditions for Purchase Orders (Goods and/or Services)

1. Provision of Supplies

- 1.1 The Supplier must provide the goods and/or services specified in the Purchase Order (Supplies) according to the provisions of the Purchase Order and these terms and conditions (collectively, Contract) and to a high standard of care, skill and diligence.
- 1.2 Supplies that are goods must be new and unused, free from any security interest, defects in materials and workmanship, of acceptable quality and must conform to any specifications and descriptions set out in the Purchase Order.
- 1.3 If the Supplies contain hazardous substances, the Supplier must provide material safety data sheets for those **6.** hazardous substances.

2. Price of Supplies

- 2.1 Except if otherwise stated in the Purchase Order, the price **7.** for the Supplies is:
 - (a) payable within 30 days of receipt by the Territory of an Invoice;
 - (b) inclusive of GST and all other taxes, duties and charges;and
 - (c) inclusive of all disbursements, including out of pocket expenses incurred by the Supplier.
- 2.2 An Invoice may be issued by the Supplier upon the satisfactory completion of each milestone set out in the Purchase Order, or if no milestones are specified, on the satisfactory completion of all services and acceptance of all goods comprising the Supplies.

3. Delivery and Acceptance

- 3.1 Supplies that are goods must be delivered at the times and places detailed in the Purchase Order, in good order and condition and marked with the relevant Purchase Order Number and full delivery point details. Delivery will be free into store unless otherwise specified in the Contract.
- 3.2 The Territory may reject Supplies supplied incorrectly, damaged, in excess of or less than specified quantities or otherwise found not to be in accordance with the Purchase Order.
- 3.3 If the Territory rejects any Supplies, the Supplier must, at no cost to the Territory and within any timeframe specified by the Territory, remove the Supplies (in the case of goods) and:
 - (a) replace any rejected Supplies that are goods; and
 - (b) re-perform any rejected Supplies that are services; or
 - (c) refund any payment for the rejected Supplies.
- 3.4 If the Territory does not reject the Supplies within 14 days of receiving the Supplies, the Territory is taken to have accepted the Supplies.

4. Title and Risk

Risk of loss and damage and title in Supplies that are goods passes to the Territory on its acceptance of those goods.

5. Warranty

For Supplies that are goods, the Supplier must:

- (a) during any warranty period specified in the Purchase Order, at no cost to the Territory, correct all defects in the Supplies by way of repair, replacement or such other means acceptable to the Territory; and
- (b) ensure, to the extent practicable and permitted by law, that the Territory receives the benefit of any warranty given by a third party with respect to any goods,

however, this does not in any way relieve the Supplier of any obligation or warranty by it under the Contract and the Supplier is liable for all costs incidental to the discharge of any warranty under the Contract.

6. Insurance

The Supplier must effect and maintain for the Purchase Order term any insurances specified in the Purchase Order.

7. Indemnity

The Supplier indemnifies the Territory, its employees and agents against all liability in respect of all claims, costs and expenses in relation to all loss, damage, injury or death to persons or property caused by the Supplier, in connection with the provision of the Supplies, except to the extent that the Territory caused the relevant loss, damage or injury.

8. Cancellation

The Territory may cancel the Purchase Order in part or whole, at any time by notice to the Supplier, if the Supplier:

- enters, or in the Territory's absolute opinion, is likely to enter, into any form of external administration or makes any arrangement with its creditors or takes advantage of any statute for the relief of insolvent debtors;
- (b) fails to provide the Supplies within, or to meet any other, timeframes or milestones specified in this Contract; or
- (c) is otherwise in breach of a provision of this Contract, where that breach:
 - (i) if capable of being remedied, is not remedied within the period specified in a notice by the Territory, or
 - (ii) is not capable of being remedied.

9. Assignment and Subcontracting

The Supplier must not assign or subcontract any of its rights or obligations under this Contract without the prior written consent of the Territory.

10. Applicable Law

The laws of the Australian Capital Territory apply to this Contract.

11. Variation

This Contract may be varied only by the written agreement of the parties prior to the expiration of the Contract.

12. Entire Agreement

The Contract constitutes the entire agreement of the parties in relation to the provision of the Supplies and all other agreements, warranties and representations are excluded.



Purchase Order

		Date:			26	5/10/2021	
		Purcha	ase Orde	r No:	IA	Q009	
Poguesting	Section Buyer: Beth Mitchell						
nequesting	Section Buyer. Beth Mitchell						
	plier Name: Stiebel Eltron (Aust) Pty Ltd 4 Salmon Street, Port Melbourne, VIC 3207						
Contact Nai	me:		(Contac	t Number:		
Ship to Loca ACT 2611	ition (if applicable) or work site: Hedley Beare Cer	ntre for	Teaching	g and L	earning, F	remantle Drive	e, Stirling
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Price Freight	Fixed Variable Quotes Attached FIS FOB Confirming Orde		\boxtimes	No No	1 1	elivery Require 4 / 01 / 2022	ed by
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Name and Title of Approving Officer	Signature:
γ	0
Andrew Parkinson, Executive Branch Manager	
Infrastructure and Capital Works	Date:
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Matthews, David From: EDU, EGMBSG To:

Subject: FW: FOR CLEARANCE: FILE2021/5304 - MIN CORRO: CO2 monitoring in classrooms & transmission of Covid-19

among children - Payne Office

Date: Wednesday, 10 November 2021 6:01:56 PM

image001.png Attachments:

image002.png image004.png

GOVERNMENT & STAKEHOLDER RELATIONS - Partnerships & Collaboration - MIN CORRO CO2 monitoring in

classrooms & ~ Payne Office.tr5

COVID For Allocation CO2 monitoring in classrooms transmission of Covid-19 among children.msg
FILE20215304 DOT POINTS CO2 monitoring in classrooms & funding for schools to reduce COVID transmission.DOTX

OFFICIAL

Approved – looks great.

Regards

Dave Matthews

From: Martinez, Catherine <Catherine.Martinez@act.gov.au> On Behalf Of EDU, EGMBSG

Sent: Wednesday, 10 November 2021 10:44 AM To: Matthews, David < David. Matthews@act.gov.au> Cc: EDU, EGMBSG < EGMBSG. EDU@act.gov.au>

Subject: FW: FOR CLEARANCE: FILE2021/5304 - MIN CORRO: CO2 monitoring in classrooms &

transmission of Covid-19 among children - Payne Office

OFFICIAL

OFFICIAL

Good morning David

Please find attached dot points for your clearance in relation to email attached.

DUE to MO today 10 November

Regards Catherine

From: Stewart, Ell < Ell.Stewart@act.gov.au > On Behalf Of ICW EBM Office

Sent: Wednesday, 10 November 2021 9:13 AM To: EDU, EGMBSG < EGMBSG.EDU@act.gov.au >

Cc: ICW EBM Office < ICWEBMOffice@act.gov.au >; EDUMCR < EDUMCR@act.gov.au >

Subject: FOR CLEARANCE: FILE2021/5304 - MIN CORRO: CO2 monitoring in classrooms & transmission

of Covid-19 among children - Payne Office

OFFICIAL

OFFICIAL

Good morning

Dot points in TRIM for clearance please – I requested a 2 day extension via MCR yesterday, but have not had that confirmed

Apologies it's overdue

Date due to EGM	9 November 2021
Date Due to MO	10 November 2021

Thanks, Ell

From: Parkinson, Andrew < <u>Andrew.Parkinson@act.gov.au</u>>

Sent: Tuesday, 9 November 2021 5:45 PM

To: ICW EBM Office < ICWEBMOffice@act.gov.au>; Mitchell, BethL < BethL.Mitchell@act.gov.au>

Cc: Ryan, JohnW < JohnW.Ryan@act.gov.au >

Subject: Fw: FOR ACTION DUE 9 NOV: FILE2021/5304 - MIN CORRO: CO2 monitoring in classrooms & transmission of Covid-19 among children - Payne Office

OFFICIAL

thanks beth
Cleared

Andrew Parkinson | Executive Branch Manager

Infrastructure & Capital Works | Education Directorate | ACT Government

Phone 02 6205 4593 | Mobile 0478 301 085

220 London Circuit, Civic | www.act.gov.au

Dhawura nguna, dhawura Ngunnawal

From: Mitchell, BethL < BethL.Mitchell@act.gov.au>

Sent: Tuesday, 9 November 2021 17:21

To: ICW EBM Office < < ICWEBMOffice@act.gov.au >

Cc: Parkinson, Andrew <<u>Andrew.Parkinson@act.gov.au</u>>; Ryan, JohnW <<u>JohnW.Ryan@act.gov.au</u>> **Subject:** RE: FOR ACTION DUE 9 NOV: FILE2021/5304 - MIN CORRO: CO2 monitoring in classrooms & transmission of Covid-19 among children - Payne Office

OFFICIAL

Hi,

This is ready for review and approval.

Cheers

Beth Mitchell | Director – Asset Strategies, Sustainability and Environment

Phone: +61 2 6207 8364 | Fax: +61 2 6205 9333 | Email: bethl.mitchell@act.gov.au Infrastructure and Capital Works | Education | ACT Government

Level 4 220 London Circuit | GPO Box 158 Canberra ACT 2601 | www.det.act.gov.au

From: Stewart, Ell < Ell.Stewart@act.gov.au > On Behalf Of ICW EBM Office

Sent: Tuesday, 9 November 2021 12:02 PM

To: Mitchell, BethL < BethL.Mitchell@act.gov.au>

 $\textbf{Cc:} \ Parkinson, Andrew < \underline{Andrew.Parkinson@act.gov.au} >; \ Ryan, \ JohnW. \ Ryan@act.gov.au >; \ ICW > \underline{Andrew.Parkinson@act.gov.au} >; \ Andrew < \underline{Andrew.Parkinson@act.gov.au} >; \ Andrew.Andrew.Andrew.Andrew.Andrew.Andrew.Andrew.Andre$

EBM Office < ICWEBMOffice@act.gov.au>

Subject: RE: FOR ACTION DUE 9 NOV: FILE2021/5304 - MIN CORRO: CO2 monitoring in classrooms &

transmission of Covid-19 among children - Payne Office

OFFICIAL

Thanks Beth, I'll ask for some extra time but if you can still send by COB that would be great

ΕII

From: Mitchell, BethL < BethL.Mitchell@act.gov.au>

Sent: Tuesday, 9 November 2021 11:44 AM

To: ICW EBM Office < ICWEBMOffice@act.gov.au>

Cc: Parkinson, Andrew <<u>Andrew.Parkinson@act.gov.au</u>>; Ryan, JohnW <<u>JohnW.Ryan@act.gov.au</u>> **Subject:** RE: FOR ACTION DUE 9 NOV: FILE2021/5304 - MIN CORRO: CO2 monitoring in classrooms &

transmission of Covid-19 among children - Payne Office

Importance: High

OFFICIAL

Hi,

I can not meet this timeframe. I can get it done by COB at the earliest.

Cheers

Beth Mitchell | Director – Asset Strategies, Sustainability and Environment

Phone: +61 2 6207 8364 | Fax: +61 2 6205 9333 | Email: bethl.mitchell@act.gov.au

Infrastructure and Capital Works | Education | ACT Government

Level 4 220 London Circuit | GPO Box 158 Canberra ACT 2601 | www.det.act.gov.au

From: Stewart, Ell < Ell.Stewart@act.gov.au > On Behalf Of ICW EBM Office

Sent: Sunday, 7 November 2021 8:43 PM

To: Mitchell, BethL < BethL.Mitchell@act.gov.au>

Cc: ICW EBM Office < ! Parkinson, Andrew < Andrew.Parkinson@act.gov.au >; Parkinson, Andrew < Andrew.Parkinson@act.gov.au >;

Ryan, JohnW < JohnW.Ryan@act.gov.au >

Subject: FOR ACTION DUE 9 NOV: FILE2021/5304 - MIN CORRO: CO2 monitoring in classrooms &

transmission of Covid-19 among children - Payne Office

Importance: High

OFFICIAL

Beth, can you please provide some dot points (on the template in TRIM) for the below request for EBM clearance no later than 12PM TUE 9 NOV

Many thanks, Ell

From: Wraith, Clementine < Clementine. Wraith@act.gov.au > On Behalf Of EDUMCR

Sent: Friday, 5 November 2021 4:00 PM

To: ICW EBM Office < < ICWEBMOffice@act.gov.au >

Cc: EDUMCR < <u>EDUMCR@act.gov.au</u>>; EDU, EGMBSG < <u>EGMBSG.EDU@act.gov.au</u>>; Parkinson, Andrew

<<u>Andrew.Parkinson@act.gov.au</u>>

Subject: FOR ACTION: FILE2021/5304 - MIN CORRO: CO2 monitoring in classrooms & transmission of

Covid-19 among children - Payne Office

OFFICIAL

Good afternoon,

Please action on the attached reference. Please review the below table to provide the appropriate response type and note the due dates.

Title/Question	MIN CORRO: CO2 monitoring in classrooms & transmission of Covid-19 among children - Payne Office
Action	Prepare dot points, as per Advisor's comments – "Include some info about how ACT public schools are using co2 monitors, and some info about the additional funding provided by the government for terms 4, 1 and 2 to help reduce risk of COVID transmission in schools."
Responsibility	ICW
Response	Dot points
type	
TRIM	FILE2021/5304
Date due to	9 November 2021
EGM	
Date Due to	10 November 2021
MO	
Clearance	Please refer to the Executive Clearance Protocol document for appropriate
	clearance levels/drop copy requirements: <u>here</u>
Comment	Please contact edumcr@act.gov.au if you have any questions.

Please let me know if you have any queries.

Kind regards, Clementine

From: Metherell, Skye < Skye.Metherell@act.gov.au> On Behalf Of Education DLO

Sent: Friday, 5 November 2021 11:51 AM **To:** EDUMCR < EDUMCR@act.gov.au >

Subject: COVID For Allocation: CO2 monitoring in classrooms/ transmission of Covid-19 among children

OFFICIAL

Hi Clem,

I was trying to prevent the need for a Ministerial response/dot points for this one but he Advisor has asked for a few further dotties to be prepared along with the below info.

Can this please be allocated to ICW to provide the requested dot points below? If these could be provided by 10.11.2021 that would be great

Thanks, Skye

From: Hobbs, Rebecca < Rebecca. Hobbs@act.gov.au >

Sent: Thursday, 4 November 2021 4:17 PM

To: BERRY < BERRY@act.gov.au >; Education DLO < EDUDLO@act.gov.au >

Subject: RE: CO2 monitoring in classrooms/ transmission of Covid-19 among children

OFFICIAL

Hi Skye

I've deleted some content in those dot points that isn't directly relevant.

Can you please also include some info about how act public schools are using co2 monitors, and some info about the additional funding provided by the government for terms 4, 1 and 2 to help reduce risk of covid transmission in schools?

Thanks

Bec

From: BERRY < BERRY@act.gov.au > Sent: Friday, 29 October 2021 9:37 AM

To: Education DLO < <u>EDUDLO@act.gov.au</u>>; Hobbs, Rebecca < <u>Rebecca.Hobbs@act.gov.au</u>> **Subject:** RE: CO2 monitoring in classrooms/ transmission of Covid-19 among children

Morning Bec

Are you happy for me to provide below dot points to Ms Alicia Payne's Office?

Harini Walthati | Office Manager

Phone: +61 2 6205 0233

Office of Yvette Berry MLA | Member for Ginninderra

Deputy Chief Minister

Minister for Education and Early Childhood Development

Minister for Housing and Suburban Development

Minister for the Prevention of Domestic and Family Violence

Minister for Women

Minister for Sport and Recreation

Phone: +61 2 6205 0233 | Email: <u>berry@act.gov.au</u> <u>Facebook</u> | <u>Twitter</u> | <u>www.yvetteberry.com.au</u>





Please consider the environment before printing this email. If printing is necessary, print double-sided and black and white.

Please note that from 1 January 2018 ACT Government ministerial diaries are subject to publication on the ACT Government's open access website under section 23 of the *Freedom of Information Act* 2016

From: Metherell, Skye < Skye.Metherell@act.gov.au On Behalf Of Education DLO

Sent: Wednesday, 27 October 2021 3:52 PM

To: Hobbs, Rebecca < <u>Rebecca.Hobbs@act.gov.au</u>>

Cc: BERRY < BERRY@act.gov.au >

Subject: RE: CO2 monitoring in classrooms/ transmission of Covid-19 among children

OFFICIAL

Hi Bec,

I was wondering if this could be covered off by providing the below dot points which were cleared through PICC yesterday?

- Improving air quality in ACT public schools has been prioritised ahead of students returning to on campus learning this term. Every school has its own Indoor Air Quality Plan which lists actions already undertaken by the Directorate (e.g. HVAC systems change) and actions for schools to undertake each day to improve air quality. These Indoor Air Quality Plans can be found on each school's website. Ventilation is one component of a multilayered approach that has been implemented to prevent transmission of COVID-19 in schools.
- Safe Work Australia and the Australian Health Protection Principal Committee (AHPPC) advise air purification units and HEPA filters can be useful in spaces where ventilation is measured to be inadequate. Fortunately ACT public schools do not have many rooms without enough ventilation and these rooms are typically not teaching spaces.
- We appreciate the support of school communities in offering air purification units or fundraising for them. However, ACT public schools will not be accepting these units. If you would like to make

a contribution to your school, please speak with your Principal about which types of donations would be most welcome.

Thanks, Skve

From: BERRY < BERRY@act.gov.au>

Sent: Tuesday, 26 October 2021 12:04 PM **To:** Education DLO < <u>EDUDLO@act.gov.au</u>>

Cc: Hobbs, Rebecca < Rebecca. Hobbs@act.gov.au >

Subject: FW: CO2 monitoring in classrooms/ transmission of Covid-19 among children

Hi Skye,

Please see below/ attached correspondence related to Education. For appropriate action please.

Thank you, Harini

Harini Walthati | Office Manager

Phone: +61 2 6205 0233

Office of Yvette Berry MLA | Member for Ginninderra

Deputy Chief Minister

Minister for Education and Early Childhood Development

Minister for Housing and Suburban Development

Minister for the Prevention of Domestic and Family Violence

Minister for Women

Minister for Sport and Recreation

Phone: +61 2 6205 0233 | Email: <u>berry@act.gov.au</u> <u>Facebook</u> | <u>Twitter</u> | <u>www.yvetteberry.com.au</u>





Please consider the environment before printing this email. If printing is necessary, print double-sided and black and white.

Please note that from 1 January 2018 ACT Government ministerial diaries are subject to publication on the ACT Government's open access website under section 23 of the *Freedom of Information Act* 2016

From:

Sent: Tuesday, 26 October 2021 12:00 PM

To: BERRY < BERRY@act.gov.au>

Subject: FW: CO2 monitoring in classrooms/ transmission of Covid-19 among children

CAUTION: This email originated from outside of the ACT Government. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Dear Yvette and team,

I hope you're going well.

We've received the below email from a constituent regarding CO2 monitors in classrooms as a method of controlling the spread of Covid-19 in schools and outlining their concerns around the measures being taken regarding returning to school.

I'm just wondering if the ACT Government has considered this option in classrooms, and if your office has any advice on how to respond to the concerns raised in the email.

Thanks in advance for your help.



We acknowledge the Traditional Custodians of the ACT, respect their continuing culture and the contribution they make to the life of Canberra and the surrounding region.

From:

Sent: Wednesday, 20 October 2021 6:32 AM

To:

Subject: CO2 monitoring in classrooms/ transmission of Covid-19 among children

Dear and staff

Thank you for your email and the update.

With schools returning for primary year levels and under 12s remaining unvaccinated, I am keen to understand whether the ACT government is considering CO2 monitors in classrooms noting these are being deployed across all Government schools in the UK, many school districts in Canada and that the NSW Government is trialling a small number in some settings.

I understand that ventilation plans are being reviewed for ACT schools to mitigate transmission risks in classrooms, but without monitoring CO2 levels throughout the school day, the risk of transmission remains dynamic. UTS notes a number of studies show that airborne transmission is no different for children than it is for adults. A percentage of children may still, under the Doherty modelling become very ill if not die.

I don't believe that everything that can be done, is being done. CO2 monitors could be a game changer to mitigating transmission. And Covid-19 will spread through our community. Decisions about CO2 monitoring are not made at the school level, without it we are setting ourselves up for a game of "whack a mole" with school closures.

Australia has the advantage of looking to overseas experiences, where long Covid has been problematic.

You have written to me with an update, I hope my letter and ardent concern will be heard.

Sincerely

On Mon, 18 Oct 2021, 17:06

wrote:

View this email in your browser

Dear

As you are aware, our community came out of lockdown last Friday and I hope you all had a lovely first weekend with these increased freedoms. I wanted to write to you to thank you for playing your part in keeping Canberra safe and highlight some of the changes to restrictions.

As of writing, around 99% of Canberrans over 12 have received a first dose of the COVID-19 vaccine and almost 80% of us have received both doses. The ACT is well on the way to becoming the most vaccinated jurisdiction in the <u>world</u>. I'm so proud of our city for this monumental effort. If you are one of the few Canberrans who have not yet had the jab, <u>appointments are readily available</u> at ACT run vaccination clinics as well as in GPs and pharmacies around the city!

Like most people, I'm very much looking forward to returning to a sense of normality over the next few months. Friday marked the first step on that journey.

From last Friday, up to five people are now allowed to visit another household at any time and outdoor gatherings will be permitted with up to 25 people.

For those working from home, you are permitted to make a gradual return to work where it suits both you and your employer. Employers should continue to allow you to work from home if practical.

For Apprentices and Trainees, you are permitted to return to work.

For parents, schools have re-opened for on campus learning today (18/10) for years 11 and 12 and will open next Monday (25/10) for Kindergarten, Years 1, 2, 6, 9 and 10. Students from all year levels will return to on campus learning from the 1st of November. Child care centres will continue to be open for children whose parents are required to work and cannot provide care with

a full re-opening on the 25th within COVID health guidelines.

Essential retail continues to operate and for non-essential retail, click and collect is permitted as are booked in-person appointments for up to two people at a time. Businesses will be permitted to open to the public from the 29th of October.

Hospitality venues are able to re-open to the public with restrictions, as well as hairdressers, beauty salons, gyms, swimming pools and other businesses. For a full list of restrictions and the ACT's pathway going forward, please see this document <u>here.</u>

These first steps out of lockdown are measured and considered responses which balance a variety of factors. I want to thank the ACT Government for its strong leadership through this difficult time.

I also want to thank Canberrans for the incredible sacrifice you have made over the past few months. Your efforts during this lockdown, and compliance with the rules, have meant that our COVID outbreak was largely contained. Your willingness to get tested, get vaccinated, stay at home, and to look out for each other, have paid huge dividends in ensuring that we avoided the worst of the virus while still unvaccinated. Of course, 11 Canberrans have unfortunately lost their lives to this disease, a stark reminder of why these restrictions were necessary. My thoughts remain with their family and friends.

I know lockdown has been extremely difficult for many people. Please continue to make sure that you're looking out for your family and friends. If you need support please reach out to one of these services:

Coronavirus Mental Wellbeing Support Service – 1800 512 348
Lifeline – 13 11 14
Kids Helpline – 1800 55 1800
MensLine Australia – 1300 78 99 78
Suicide Call Back Service – 1300 659 467

As always, if you have any questions or concerns, or if there is anything myself or my office can assist you with, please don't hesitate to get in touch. You can reach me at

. For the time being, out of an abundance of

caution, my Electorate Office will remain closed to the public and my staff will work from home, however I'm looking forward to opening again and welcoming you in person soon.

Thanks again Canberra for your huge efforts over the past few months. You've been terrific.

Kind regards,

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Request from Minister's Staff

Title: CO₂ monitoring in classrooms and transmission of COVID-19 among children

TRIM number: FILE2021/5304

Request: Prepare dot points, as per Advisor's comments – "Include some info about how ACT public schools are using CO2 monitors, and some info about the additional funding provided by the government for terms 4, 1 and 2 to help reduce risk of COVID transmission in schools."

Request date: 5 November 2021

Response due to Minister's staff: 10 November 2021

Response format: dot points; related information at FILE2021/4472

Cleared by: Executive Branch Manager, Infrastructure & Capital Works

Directorate's Response

Background

- The level of CO2 in internal spaces is used as a surrogate for ventilation/indoor air quality (IAQ).
- The Education Directorate (EDU) commenced a program to install CO₂ sensors in 2018 to enable management of indoor air quality in classrooms while also managing energy efficiency.
- When connected to Heating, Ventilation and Air Conditioning (HVAC) control systems
 the sensors can be programmed to either increase or decrease outdoor air intake (for
 example to increase outdoor air intake in response to the ventilation requirements of
 COVID-19, or to decreased outdoor air to exclude bushfire smoke).
- Prior to term 4, 2021, 35 of 93 school sites had CO₂ sensors connected to school-based HVAC controls. Of these, 30 sites were connected to a central control system to enable remote access and management of indoor air quality in select spaces.
- The ACT Government has committed \$5.2 million to improve Indoor Air Quality in ACT public schools as part to the COVID-19 Pathway Out of Lock Down.
- Indoor Air Quality improvement projects include:
 - CO₂ sensors to monitor air quality in learning and teaching spaces and inform the need for additional works and verify the success of implemented project work.
 - connection of CO₂ sensors to existing and or new HVAC control systems, and
 - o installing remote access capability to allow analysis of CO₂ records and rapid response to changes in CO₂ levels.

- Projects initiated under the Indoor Air Quality Program commencing in term 4 include:
 - connection of remote access for HVAC controls and CO₂ sensors at an additional five schools, and
 - o installation of additional CO₂ sensors and remote access at an additional eight schools will see 51 per cent (48 of 93) of school sites with monitoring equipment in place.
- Two research partnerships are currently monitoring CO₂ levels along with other climatic conditions in classrooms across three schools to inform strategic planning and future upgrades.
 - The i-Hub for Affordable Heating and Cooling (2019-2022) collaboration with the University of Wollongong. The study has collected and analysed thermal comfort and CO₂ levels across classrooms at Amaroo School and Fadden Primary School. Monitoring and evaluation will continue post upgrades to HVAC systems in 2021.
 - Sustainable Healthy Environments (SHE), 2021 collaboration with University
 of Melbourne. The study has monitored a range of indoor air quality variables
 including CO₂ at Forrest Primary School. The research will review the data of the
 ACT school with schools in New South Wales and Victoria.

Issues

• The Infrastructure and Capital Works Branch of the Education Directorate is currently programming additional work that will see CO₂ monitoring available at additional school sites.