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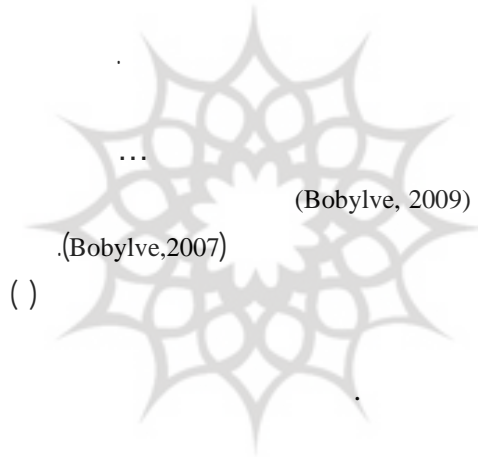


(Canto, 2006)

(Golzani,2004)

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(BobyIve, 2009)

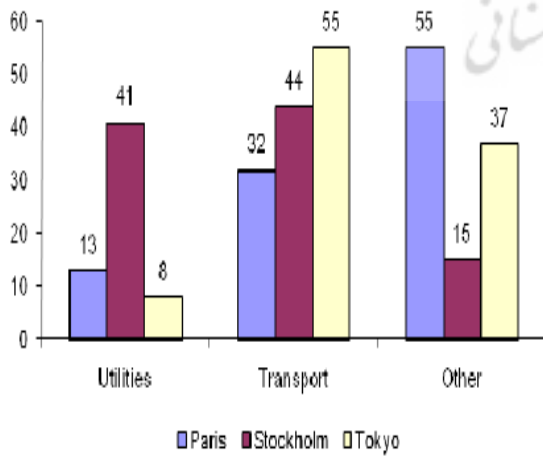
(Aborisk,1999)

(BobyIve,2007)

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(Hant,2006)

(BobyIve, 2008)



(Hrvey, 2006)

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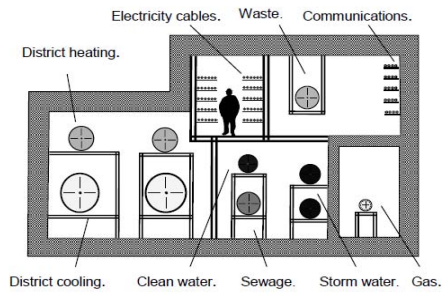
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(Hant,2006)

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(Canto-Perello,2001)

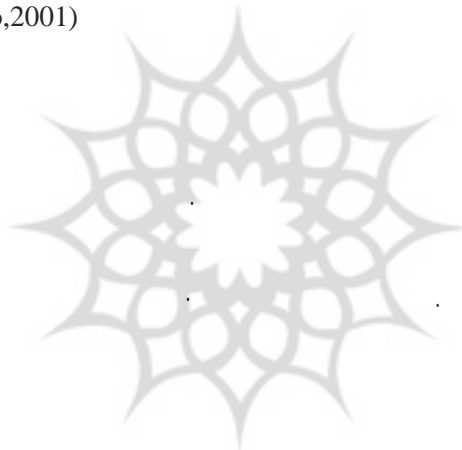


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(Curiel Esparzae, 1998)

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(Canto-Perello,2001)

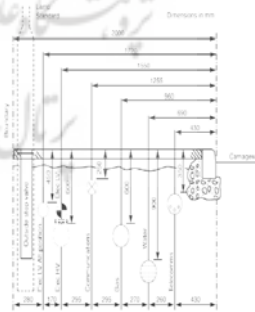


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(Goek,2001)

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 (Canto,2008)



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(CurielEsparzae, 1998)

Low Volume Sampler

(lit/min)

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ppb ^o -۵۰۰۰	SA AF22M	SO ₂
ppb ^o -۵۰۰	SA AC32M	NO ₂
ppm ^o -۴۰۰۰	SA CO12M	CO

L₅, L₉₅, L_{Min}

L_{Max}, L_{eq} ()

(/ dB)

(± dB)

A

(dB)

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Excel

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CO	/	/	/	/	/	/	ppm ()
(ppm) SO ₂	/	/	/	/	/	/	ppb ()
(ppb) NO ₂	/	/	/	/	/	/	ppb ()
(ppb) PM ₁₀	/	/	/	/	/	/	µg/m ³ ()

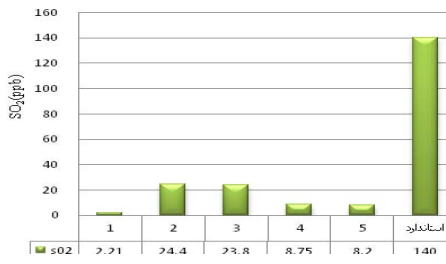
CO, SO₂,)

(NO₂)

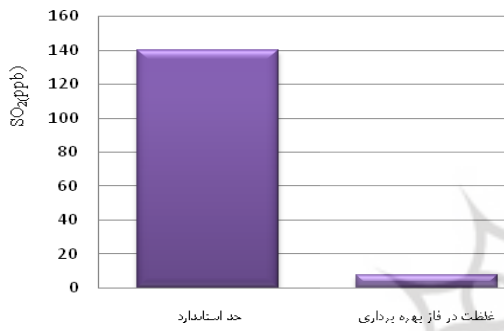
به .

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PM₁₀



SO₂ : ()



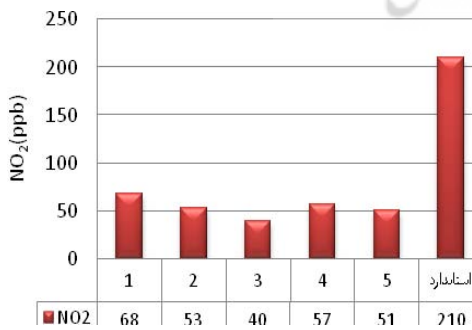
SO₂ : ()

() () : NO₂

ppb

() ()

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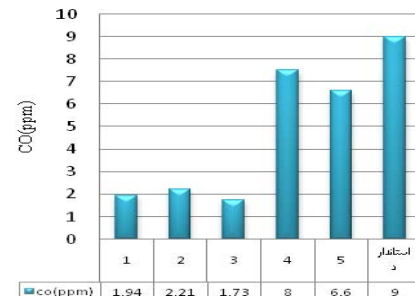
NO₂ : ()

() () : CO

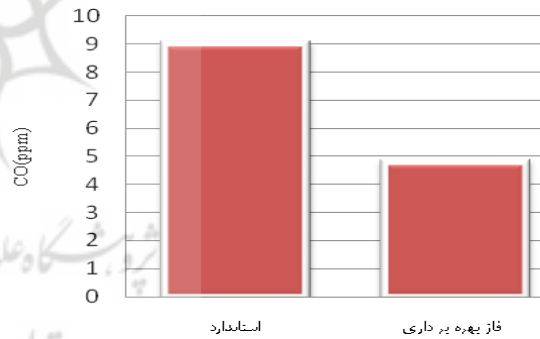
CO
ppm

() ()

خیابان‌های



CO : ()

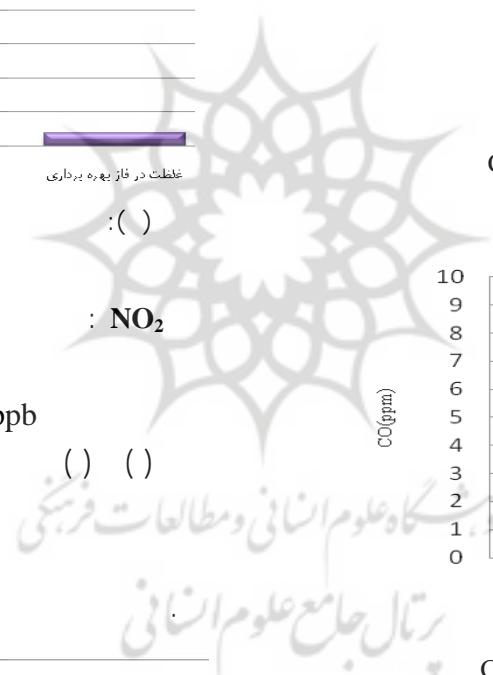


CO : ()

() () : SO₂

SO₂
ppb

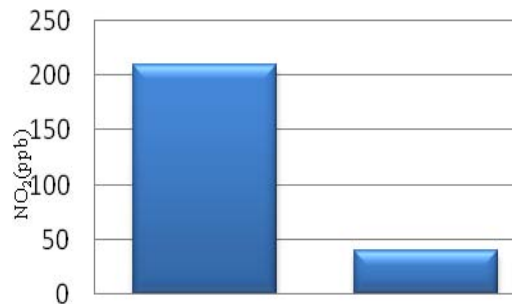
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L_5 L_{eq}

L_{max} L_{min} L_{95}

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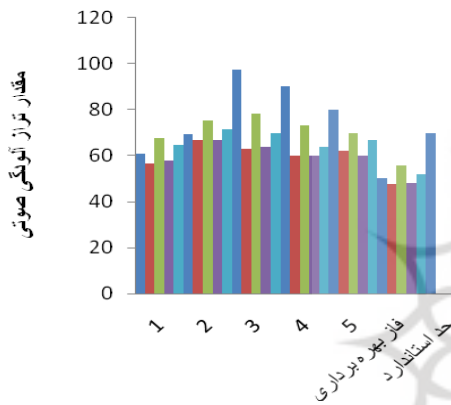


حد استاندارد

غلظت در فاز بهره برداری

NO₂

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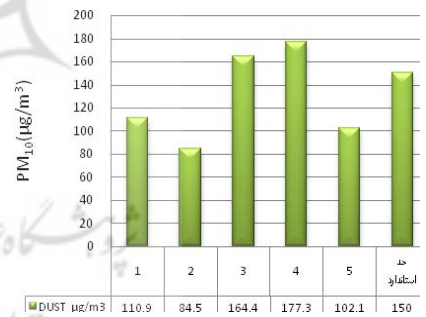
مقدار تراز آلودگی صوتی

حد استاندارد
غلظت در فاز بهره برداری

PM₁₀

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PM₁₀ (µg/m³)

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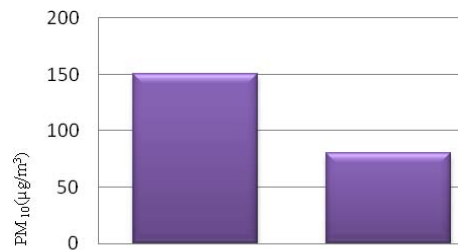
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حد استاندارد

غلظت در فاز بهره برداری

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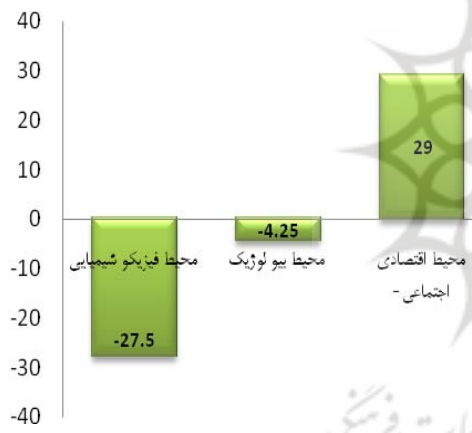
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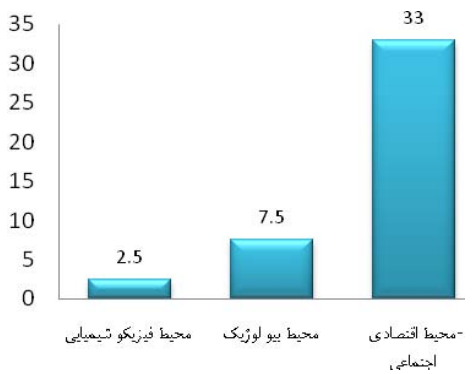
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- Canto-Perello, J. 2001. Unconventional Applications in Utility Tunnels for Urban Industrial Area Tunneling and Underground Space Technology, Volume 14, pp 211-22
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