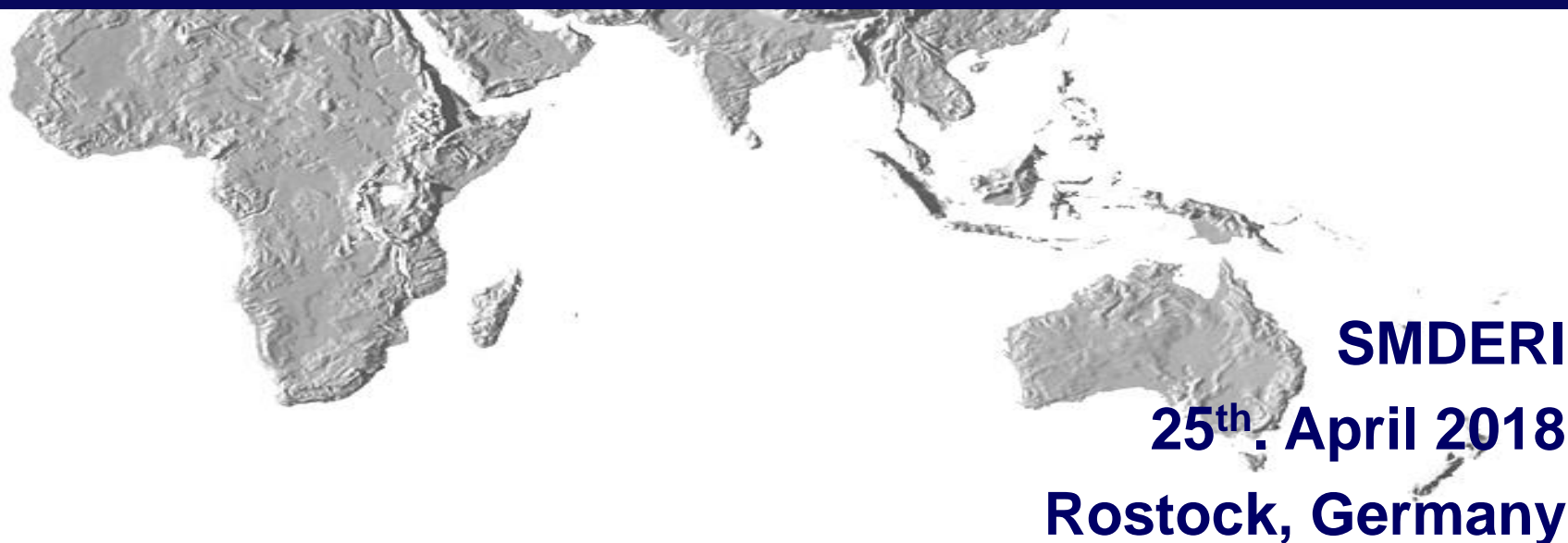




**62<sup>th</sup> CIMAC WG5**

# Regulatory and DECAs Development in China

A grayscale topographic map of Asia and Oceania is shown in the background. It includes the Indian subcontinent, Southeast Asia, Australia, and New Zealand.

**SMDERI**  
**25<sup>th</sup> April 2018**  
**Rostock, Germany**



1. Regulatory Development in China
2. Domestic Emission Control Areas

# GB 15097-2016



MINISTRY OF ENVIRONMENTAL PROTECTION  
THE PEOPLE'S REPUBLIC OF CHINA



中华人民共和国国家标准

GB 15097—2016

代替GB/T 15097-2008

船舶发动机排气污染物排放限值及  
测量方法(中国第一、二阶段)

Limits and measurement methods for exhaust pollutants  
from marine engines (CHINA I, II)

(发布稿)

本电子版为发布稿，请以中国环境科学出版社出版的正式标准文本为准。

2016-08-22 发布

2018-07-01 实施

环 境 保 护 部  
国家质量监督检验检疫总局 发布

*Limits and measurement methods for  
exhaust pollutants from marine engines  
(CHINA I, II)*

- officially released in August , 2016
- No news for it.

# GB 15097-2016

表 1 船机排气污染物第一阶段排放限值

the first stage

船机 类型	单缸排量（SV） （L/缸）	额定净功率 （P）（kW）	CO （g/kWh）	HC+ NO <sub>x</sub> （g/kWh）	CH <sub>4</sub> <sup>（1）</sup> （g/kWh）	PM （g/kWh）
第1类	SV<0.9	P≥37	5.0	7.5	1.5	0.40
	0.9≤SV<1.2		5.0	7.2	1.5	0.30
	1.2≤SV<5		5.0	7.2	1.5	0.20
第2类	5≤SV<15		5.0	7.8	1.5	0.27
	15≤SV<20	P<3300	5.0	8.7	1.6	0.50
		P≥3300	5.0	9.8	1.8	0.50
	20≤SV<25		5.0	9.8	1.8	0.50
	25≤SV<30		5.0	11.0	2.0	0.50
（1）仅适用于 NG（含双燃料）船机。						

(1) applies only to NG (including dual fuel) ship machines.

➤ Execution date: The first stage July 1, 2018

# GB 15097-2016

表 2 船机排气污染物第二阶段排放限值

the second stage

船机 类型	单缸排量 (SV)(L/缸)	额定净功率 (P) (kW)	CO (g/kWh)	HC+NO <sub>x</sub> (g/kWh)	CH <sub>4</sub> <sup>(1)</sup> (g/kWh)	PM (g/kWh)
第 1 类	SV<0.9	P≥37	5.0	5.8	1.0	0.3
	0.9≤SV<1.2		5.0	5.8	1.0	0.14
	1.2≤SV<5		5.0	5.8	1.0	0.12
第 2 类	5≤SV<15	P<2000	5.0	6.2	1.2	0.14
		2000≤P<3700	5.0	7.8	1.5	0.14
		P≥3700	5.0	7.8	1.5	0.27
	15≤SV<20	P<2000	5.0	7.0	1.5	0.34
		2000≤P<3300	5.0	8.7	1.6	0.50
		P≥3300	5.0	9.8	1.8	0.50
	20≤SV<25	P<2000	5.0	9.8	1.8	0.27
		P≥2000	5.0	9.8	1.8	0.50
	25≤SV<30	P<2000	5.0	11.0	2.0	0.27
		P≥2000	5.0	11.0	2.0	0.50

(1) 仅适用于 NG (含双燃料) 船机。

➤ Execution date: Second stage July 1, 2021

# The implement of GB 15097 in Shenzhen



ICS   
 点击此处添加中国标准文献分类号

SZJG  
深圳经济特区技术规范  
SZJG XX-XXXX

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深圳市港口作业船舶发动机排气污染物排放限值及测量方法  
Limits and measurement methods of exhaust emission from engine of port operation ship in Shenzhen  
(征求意见稿)

XXXX-XX-XX 发布  
XXXX-XX-XX 实施  
深圳市市场监督管理局 发布

*Limits and measurement methods for exhaust emission from engine of operation ship in Shenzhen*

- draw up according to GB 15097-2016.
- draft for comments, June, 2017.

# The implement of GB 15097 in Shenzhen

表1 深圳市港口作业船舶发动机排气污染物第一阶段排放限值

the first stage

船机 类型	单缸排量 (SV) (L/ 缸)	额定净功率 (P) (kW)	CO (g/kWh)	HC+NO <sub>x</sub> (g/kWh)	CH <sub>4</sub> (1) (g/kWh)	PM (g/kWh)
第1 类	SV<0.9	P≥37	5.0	7.5	1.5	0.24
	0.9≤SV<1.2		5.0	7.2	1.5	0.18
	1.2≤SV<5		5.0	7.2	1.5	0.12
第2 类	5≤SV<15		5.0	7.8	1.5	0.16
	15≤SV <20	P<3300	5.0	8.7	1.6	0.3
		P≥3300	5.0	9.8	1.8	0.3
	20≤SV<25		5.0	9.8	1.8	0.3
	25≤SV<30		5.0	11	2.0	0.3
(1) 仅适用于NG（含双燃料）船机						

- Execution date: The first stage July 1, 2017.
- The CO、HC+NO<sub>x</sub>、CH<sub>4</sub> limit is the same as GB15097-2016.
- The PM limit is about 60% of the one stipulated in GB 15097-2016.

# The implement of GB 15097 in Shenzhen

表2 深圳市港口作业船舶发动机排气污染物第二阶段排放限值

the second stage

船机 类型	单缸排量 (SV) (L/ 缸)	额定净功率 (P) (kW)	CO (g/kWh)	HC+NO <sub>x</sub> (g/kWh)	CH <sub>4</sub> (1) (g/kWh)	PM (g/kWh)
第1 类	SV<0.9	P≥37	4.0	4.7	1.0	0.18
	0.9≤SV<1.2		4.0	4.7	1.0	0.08
	1.2≤SV<5		4.0	4.7	1.0	0.07
第2 类	5≤SV< 15	P<2000	4.0	5.0	1.2	0.08
		2000≤P< 3700	4.0	6.3	1.5	0.08
		P≥3700	4.0	6.3	1.5	0.16
	15≤SV <20	P<2000	4.0	5.6	1.5	0.2
		2000≤P< 3300	4.0	7.0	1.6	0.3
	20≤SV <25	P≥3300	4.0	7.9	1.8	0.3
		P<2000	4.0	7.9	1.8	0.16
		P≥2000	4.0	7.9	1.8	0.3
	25≤SV <30	P<2000	4.0	8.8	2.0	0.16
		P≥2000	4.0	8.8	2.0	0.3

(1) 仅适用于NG(含双燃料)船机

- Execution date: The second stage January 1, 2020
- The CH<sub>4</sub> limit is the same as GB15097-2016.
- The CO、HC+NO<sub>x</sub>、PM limit is respectively 80%、80%、60% of the one stipulated in GB 15097-2016.



# Domestic Emission Control Areas

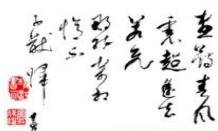


中华人民共和国交通运输部

Ministry of Transport of the People's Republic of China

- Since Bohai Rim、Yangtze River Delta、Pearl River Delta were set as domestic emission control areas(DECA), SOx pollution in these areas has reduced obviously.
- To control the SOx emission, Fujian Province submitted a proposal to set the west side of Taiwan Straits as DECA .
- The Ministry of Transport of the People's Republic of China is working on feasibility study of new DECA.

谢谢! Thank you!



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