State of California AIR RESOURCES BOARD

EXECUTIVE ORDER D-353-24 Relating to Exemptions under Section 27156 of the Vehicle Code

Miller Catalyzer Corporation "Series 60000 OBD II Compliant Three-way Catalytic Converter"

WHEREAS, Vehicle Code Sections 27156 and Section 2222(h), Title 13, California Code of Regulations (hereafter "CCR"), authorize the California Air Resources Board and its Executive Officer to exempt new aftermarket catalytic converters from the prohibitions of Vehicle Code Section 27156.

WHEREAS, Miller Catalyzer Corporation (Miller) of 3295 Depot Road, Hayward, California 94545, has applied to the Air Resources Board for exemption from the prohibitions in Vehicle Code Section 27156 to market its new aftermarket Series 60000 three-way catalytic converter (TWC) for installation on selected 1996 through 2003 model year GM passenger (PC) cars and light-duty trucks 1 (LDT1) equipped with on-board diagnostic II (OBD-II) systems as specified in Appendix D-353-24 and incorporated herein. The Series 60000 TWC will be used for single (one unit) exhaust system applications for selected GM PC/LDT1.

The TWC may also be installed on non-OBD II vehicles (1995 and older) similar in engine and exhaust configuration to those listed in Appendix D-353-24.

WHEREAS, pursuant to the authority vested in the Executive Officer by Health and Safety Code Section 39515 and in the Chief, Mobile Source Operations Division by Health and Safety Code Section 39516 and Executive Order G-02-003, Air Resources Board finds that the above aftermarket catalytic converter complies with the California Vehicle Code Section 27156 and Title 13, California Code of Regulations, Section 2222(h). The emissions performance of the catalytic converter was based on durability bench-aging by Umicore Automotive Catalysts using Air Resources Board-modified RAT-A bench-aging cycle for 75 hours, as specified in the "Optional Evaluation Procedures for New Aftermarket Non-original Equipment Catalytic Converters Equipped with On-Board Diagnostic II (OBD II) Systems."

WHEREAS, emissions tests conducted at the Automotive Testing Development Services, Inc. (ATDS), Ontario, California, using a 1999 3.1L Chevrolet Malibu equipped with a single exhaust system, and certified to the Low Emission Vehicle (LEV, PC) emission standards showed that the vehicle met the applicable emission standards with Series 60000 TWC (one unit) installed.

OBD II compatibility tests performed on the same test vehicle showed that Series 60000 TWC did not affect the vehicle's ability to perform OBD II system monitoring. Emission test results in grams per mile are shown below.

	ATDS,	Ontario, Califor	nia	
	3.1L Ch	evrolet Malibu 7		
	NMOG	CO	NOx	Remarks
100K Standard	0.090	4.2	0.3	
Test 1	0.070	1.5	0.1	Pass
Test 2	0.064	1.5	0.1	Pass

IT IS HEREBY RESOLVED that the above catalytic converter is exempt from the prohibitions in Vehicle Code Section 27156 for installation on the approved vehicle applications specified in Appendix D-353-24 subject to the following conditions:

- 1. No changes are permitted to the catalytic converter as described in the application for exemption. Any changes to the catalytic converter or any of their components, and other factors addressed in this order must be evaluated and approved by the Air Resources Board prior to marketing in California.
- 2. Marketing of the catalytic converter using identifications other than those shown in the exemption application, and in this Executive Order, or marketing of the catalytic converter for application other than the ones shown in this Executive Order shall be prohibited unless prior approval is obtained from the Air Resources Board. Exemption of these products shall not be construed as an exemption to sell, offer for sale, or advertise any components of the catalytic converter as individual devices.
- 3. Any oral or written references to this Executive Order or its content by Miller Catalyzer Corporation, its principals, agents, employees, distributors, dealers, or other representatives must include the disclaimer that the Executive Order or the exemption it provides is not an endorsement or approval of any emission reduction claims for the catalytic converter and is only a finding that the catalytic converter is exempt from the prohibitions of Vehicle Code Section 27156.
- 4. Miller Catalyzer Corporation's installation instructions for the new catalytic converter must conform to requirements in Paragraphs I and X of the "Optional Evaluation Procedures for New Aftermarket Non-original Equipment Catalytic Converters Equipped with On-Board Diagnostic II (OBD II) Systems."
- 5. Upon installation, the catalytic converter must carry a manufacturer's warranty for 50,000 miles on the substrates and 50,000 miles or five years on the shell and end pipes.
- 6. Miller Catalyzer Corporation and its vendors may not advertise the new aftermarket catalytic converter as a "high or easy flow" catalytic converter or use any phrase that could make them appear to perform better than an OEM catalytic converter.
- 7. The new aftermarket catalytic converter substrate may not be sold or supplied to a third party by Miller, its associates, vendors, other businesses, and

individuals associated with Miller, to be assembled in a different facility and marketed under this Executive Order.

- 8. Any marketing arrangement of the new aftermarket catalytic converter by a third party, which involves the use of packaging identification different from the ones described in this Executive Order must be approved by Air Resources Board prior to shipment.
- 9. Miller must submit the required quality audit and production quantity reports for its aftermarket catalytic converter semi-annually, covering the periods January 1 through June 30, and July 1 through December 31.

Violation of any of the above conditions shall be grounds for revocation of this order. The order may be revoked only after a ten day written notice of intention to revoke it, during which period the holder of the order may request in writing a hearing to contest the proposed revocation. If a hearing is requested, it shall be held within ten days of receipt of the request, and the order may not be revoked until a determination is made, after the hearing, that grounds for revocation exist.

Executed at El Monte, California, this _30 day of June 2008.

Annette Hebert, Chief Mobile Source Operations Division

		Miller Catalyzer Corporation, Cataly	tic Conver	ter Series 60000, Gei	neral Motors P	assenger	Cars and	LDT1 Trucks	, Up to 3,75	lbs. LVW		
No.	Model Year	Vehicle Model	Engine Size	Engine Family	Certification Level	Weight Class	Exhaust Type	Total Converters	Converter Type	Monitored	Universal	Direct Fit
1		Saturn SL1 Sedan, SW1, Wagon, SC1 Coupe	1.9L	TGM1.9V8G2EK	TLEV	PC						
2		Saturn SL2 Sedan, SW2, Wagon, SC2 Coupe	1.90	TGM1.9VJGFEK								
3		Chevrolet S10 Pickup 2WD		TGM2.218GFEK	Tier 1	LDT1	7					
3		GMC Sonoma Pickup 2WD Isuzu Hombre Pickup 2WD		IUM2.2100FEK								
4		Cavalier, Sunfire, Corsica, Beretta	2.2L	TGM2.2V8G2EK	TLEV		4					
		Ciera SL, Cavalier, Sunfire						l I				
5		Corsica, Beretta, Century, Century Wagon	_	TGM2.2V8GKEK	Tier 1							
	1	Achieva										
6		Cavalier, Skylark	2.4L	TGM2.4VJG2EK	TLEV							
		Grand Am, Sunfire										
7]	Cavalier, Sunfire, Grand Am, Achieva, Skylark	2.4L	TGM2.4VJGKEK								
		Buick Century, Regal, Skylark								l l	60000	TBD
8		Chevrolet Beretta, Corsica, Lumina, Monte Carlo	3.1L	TGM3.1V8GFEK	1							
l °		Oldsmobile Achieva, Ciera, Cutlass Supreme	5.16	10005.17001 EK		PC	S	1	TWC	1		
_		Pontiac Grand Am, Grand Prix				10	l I			1 1		
	Chevrolet Lumina, Monte Carlo										1	
9		Oldsmobile Cutlass Supreme	3.4L	TGM3.4VJGFEK		ĺ	ļ					
		Pontiac Grand Prix			4							
10		Buick Park Avenue Ultra, Riviera		TGM3.8V8GFFK	Tier 1							
		Pontiac Bonneville SSE										
		Buick LeSabre, Park Avenue, Regal, Riviera	3.8L									
11		Chevrolet Camaro		TGM3.8V8GKEK								
	ļ	Oldsmobile Delta 88, 98, LSS										
 	1	Pontiac Bonneville SE, Firebird			4		4					
12		Chevrolet S10 Pickup 2WD	4.3L	TGM4.31PGFEK		LDT1						
	4	GMC Sonoma Pickup 2WD			4		4					
13		4.6L Seville, Eldorado, Deville	4.6L 4.0L	TGM4.6VJGFEL		PC	1	[
	L	Aurora	4.0L	L	L	<u>I</u>	L	L				
14	1	Saturn SL1 Sedan, SW1, Wagon, SC1 Coupe	1.9L	VGM1.9V8G2EK	TLEV	PC	<u> </u>	r			<u> </u>	
14 15	1		1.9L_	VGM1.9V802EK VGM2.218G1EK		LDT1	Í					1
15		2.2L	VGM2.2V8G1EK	Tier 1		S	1	TWC	1	60000	TBD	
17	1997	Cavalier, Sunfire	تلو،بو	VGM2.2V8G1EK	TLEV	1	5		rwc	1	60000	IBD
18	1	Achieva, Cavalier, Sunfire	2.4L	VGM2.4VJG1EK		PC						
19	1.	Catera	3.0L	VGM2.4VJGTEK	Tier 1			2	TWC	2	60000	TBD
17	L			T TO TO TO TO TO TO	L	L	<u> </u>	<u> </u>	1,110		00000	

	- <u> </u>	MIller Catalyzer Corporation, Cataly	tic Conver	ter Series 60000, Ger	neral Motors P	assenger	Cars and l	LDT1_Trucks	, Up to 3,75	0 lbs. LVW		
No.	Model Year	Vehicle Model	Engine Size	Engine Family	Certification Level	Weight Class	Exhaust Type	Total Converters	Converter Type	Monitored	Universal	Direct Fit
20		Buick Century, Skylark Chevrolet Lumina, Monte Carlo, Malibu Oldsmobile Achieva, Cutlass, Cutlass Supreme Pontiac Grand Am, Grand Prix	3.1L	VGM3.1V8G1EK								
21		Chevrolet Lumina, Monte Carlo Oldsmobile Cutlass Supreme		VGM3.4VJG1EK	Tier 1			1	TWC	1	60000	
22		Buick Park Avenue Ultra, Riviera, Regal GS Oldsmobile Delta 88, Regency Pontiac Bonneville SE, Grand Prix		VGM3.8V8G1FK		PC	S					
23		Bonneville, Le Sabre, Park Ave., Riviera Century, Olds 88/Regency Grand Prix Regal		VGM3.8V8G2EK	TLEV							TBD
24		Chevrolet Camaro Oldsmobile Regency, Delta 88 Pontiac Firebird		VGM3.8V8GKEK								
25		Chevrolet S10 Pickup 2WD GMC Sonoma Pickup 2WD Isuzu Hombre Pickup 2WD		VGM4.31PG1EK	Tier 1	LDT1						
26		Aurora Seville, Eldorado, Deville	4.0L 4.6L	VGM4.6VJG1EK		PC						
27		Chevrolet S10 Pickup 2WD GMC Sonoma Pickup 2WD Isuzu Hombre Pickup 2WD	2.2L	WGMXT02.2122	Tier1					1	60000	
28 29	1998	S10 Pickup, Sonoma, Isuzu Hombre 2WD Chevrolet S10 Pickup 2WD GMC Sonoma Pickup 2WD Isuzu Hombre Pickup 2WD	4.3L 1.9L	WGMXT02.2124 WGMXT04.3182	TLEV Tier1	LDT1 PC	S	1	TWC			TBD
30		Saturn SC Coupe Saturn SL Sedan Saturn SW Wagon		WGMXV01.9002	TLEV							
31	4	Cavalier, Sunfire Sunfire, Chevrolet Cavalier	2.2L	WGMXV02.2022 WGMXV02.2023	Tier 1 TLEV							
_33	1	Cavalier, Sunfire, Grand Am, Achieva	2.4L	WGMXV02.4025	Tier 1	L						L

		MIller Catalyzer Corporation, Catal	ytic Conver	ter Series 60000, Ger	neral Motors P	assenger	Cars and I	LDT1 Trucks	, Up to 3,75	lbs. LVW		
No.	Model		Engine	Engine Family	Certification	Weight	Exhaust	Total	Converter	Monitored	Universal	Direct
110.	Year		<u>Size</u>		Le <u>vel</u>	Class	<u>Type</u>	Converters	Туре		emversar	Fit
		Buick Skylark, Olds Achieva										
34		Chevrolet Malibu	2.4L	WGMXV02.4026	TLEV		s	1		1		
54		Olds Cutlass, Grand Am	~		100,		Ŭ	1		1		
		Sunfire, Chevrolet Cavalier										
35		Catera	3.0L	WGMXV03.0061			D	2		2		
36		Grand Am, Achieva, Skylark		WGMXV03.1042	Tier 1							
37		Chevrolet Lumina, Monte Carlo, Malibu) [WGMXV03.1043								
		Pontiac Grand Prix, Buick Century, Cutlass]					60000	
		Buick Century	3.1L									
38		Chevrolet Lumina, Olds Cutlass, Grand Prix		WGMXV03.1044								
50		Chevrolet Malibu		W GIVIA V 05.1044				1	TWC			I
		Chevrolet Monte Carlo				PC						TBD
		Bonneville, Buick Park Avenue			TLEV							
		Buick Lesabre, Olds 88 Regency		WGMXV03.8048			s			1		
39		Buick Regal, Chevrolet Lumina, Grand Prix					0	1				
		Chevrolet Monte Carlo										
		Oldsmobile Intrigue	3.8L									
40		Camaro, Firebird	4	WGMXV03.8049								
		Buick Riviera, Park Avenue, Regal]						
41		Oldsmobile Eighty-Eight, Regency		WGMXV03.8051	Tier 1							
		Pontiac Bonneville, Grand Prix										
42		Aurora	4.0L	WGMXV04.6066								
		Seville, Eldorado, Deville	4.6L									L
		Chevrolet S10 Pickup										
43		GMC Sonoma Pickup	2.2L	XGMXTO2.2122		LDT1						
		Isuzu Hombre Pickup 2WD			TLEV							
44		Saturn SL Sedan, SW, Wagon, SC Coupe	1.9L	XGMXV01.9002	1	[
45		Pontiac Sunfire, Chevrolet Cavalier		XGMXV02.2022	_							
		Chevrolet Cavalier	2.2L	XGMXV02.2023								
46		Pontiac Sunfire		XGIVIX V02.2025	LEV							
	1999	Olds Alero					0	1	TWC	1	(0000	
47		Olds Cutlass	-	XGMXV02.4025	TLEV		S	1	IWC	1	60000	TBD
		Pontiac Grand AM				PC						
		Chevrolet Cavalier	7] .						
		Chevrolet Malibu	2.4L									
40		Olds Alero		VCMVV02 4007	LEV							
48		Olds Cutlass	7	XGMXV02.4027	LEV							
		Pontiac Grand Am										
		Pontiac Sunfire										

<u> </u>		Miller Catalyzer Corporation, Catal	ytic Conver	ter Series 60000, Ge	neral Motors P	assenger	Cars and I	LDT1 Trucks	, Up to 3,75	0 lbs_LVW		
No.	Model Year		Engine Size	Engine Family	Certification Level		Exhaust Type		Converter Type		Universal	Direct Fit
49		Catera	_3.0L	XGMXV03.0061			D	2	TWC	2		
50	1	Chevrolet Malibu	3.1L	XGMXV03.1043	LEV							
50		Olds Cutlass										i 1
		Buick Century										
		Chevrolet Lumina						ļ				
51		Chevrolet Monte Carlo	3.1L/3.4L	XGMXV03.4042								
		Olds Alero	0.11110.41	/ ()///////////////////////////////////]]				
		Pontiac Grand AM										
	1	Pontiac Grand Prix]			
52	1	Olds Intrigue	3.5L	XGMXV03.5064								
{	Į .	Buick Lesabre				ł						
		Buick Park Avenue			TLEV						60000	
		Buick Regal		XGMXV03.8048								
		Chevrolet Camaro										
		Chevrolet Lumina										
53	1	Chevrolet Monte Carlo				1		1	,			
		Olds Eighty Eight	4			ļ						
		Olds Intrigue	3.8L			PC						
	1999	Olds Regncy							TWC			TBD
		Pontiac Bonneville					S			1		
	1	Pontiac Firebird										
	4	Pontiac Grand Prix				4						
		Buick Lesabre										
		Buick Regal										
	h	Chevrolet Camaro				ľ						
		Chevrolet Lumina]]				
	ł	Chevrolet Monte Carlo										
54		Olds Eighty-Eight		XGMXV03.8049	LEV							
		Olds Intrigue							ļ			
		Olds Park Avenue					1					
		Olds Regency										
		Pontiac Bonneville										
		Pontiac Firebird										
	4	Pontiac Grand Prix			<u>├</u> ────	4						
	1	Buick Park Avenue	4]	}						
55		Buick Regal	4	XGMXV03.8051	TLEV							1
		Buick Riviera	-									
		Pontiac Grand Prix		L	L	L					I	

		Miller Catalyzer Corporation, Cataly	tic Conver	ter Series 60000, Gei	neral Motors Pa	assenger	Cars and I	LDT1 Trucks	, Up to 3,75	0 lbs. LVW		
No.	Model Year	Vehicle Model	Engine Size	Engine Family	Certification Level	Weight Class	Exhaust Type	Total Converters	Converter Type	Monitored	Universal	Direct Fit
56		Oldsmobile Eighty-Eight, Regency Pontiac Bonneville		XGMXV03.8052	Tier 1							
57	1999	Buick Park Avenue Buick Regal Buick Riviera Pontiac Bonneville, Grand Prix	3.8L	XGMXV03.8053	LEV	PC	S	1	TWC	1	60000	TBD
58		Aurora Seville, Eldorado, Deville, Limousine Hearse	4.0L 4.6L	XGMXV04.6068	Tier 1							
59	2000 Pontiac Sunfire (Manual), Chevrolet Cavalier (manual)		YGMXX02.2023	TLEV	PC							
		S10 PU 2WD, GMC Sonoma 2WD, Hombre PU 2WD	2.2L			LDT1				1	60000	
60		S10 Pickup, Sonoma, Isuzu Hombre 2WD		YGMXT02.2122	LEV		{					
61	 	Chevrolet Malibu, Cavalier, Oldsmobile Alero Chevrolet Malibu, Cavalier, Oldsmobile Alero Pontiac Sunfire, Grand Am Pontiac Sunfire, Grand Am Saturn LS, LW	2.4L 2.2L 2.4L 2.2L	YGMXV02.4022			S	1	TWC			TBD
62		Aurora, Intrigue	3.5L	YGMXV03.5064								
63		Buick Lesabre, Park Avenue, Regal Chevrolet Impala, Monte Carlo, Firebird Pontiac Bonneville SE, Firebird, Grand Prix	3.1L/ 3.4L/ 3.8L	YGMXV03 8043		PC						
64		Aurora Seville, Eldorado, Deville	4.0L 4.6L	YGMXV04.6065	Tier 1							
65		Aurora Seville, Deville, Limousine, Funeral Coach, Hearse	4.0L 4.6L	YGMXV04.6066	LEV							
66		S10 Pickup, Sonoma, Isuzu Hombre 2WD		1GMXT02.2122	LEV	LDT1		I	· · · · · · · · · · · · · · · · · · ·			-
67	1	Cavalier, Sunfire	2.2L	1GMXV02.2024	TLEV		1					
68		Saab 9-3, 9-3 Convertible, 9-5, 9-5 Wagon Saab 9-3, 9-3 Convertible, 9-5, 9-5 Wagon	2.0L 2.3L	1GMXV02.3001								TBD
69	2001	Cavalier, Sunfire, Grand Am, Alero	2.2L/2.4L	1GMXV02.4022	LEV	PC	S	1	TWC	1	60000	
70]	Saab 9-5, Saab 9-5 Wagon	3.0L	1GMXV03.0062								
71		Oldsmobile Aurora	3.5L	1GMXV03.5064								
72		Oldsmobile Aurora, Intrigue		1GMXV03.5065	l		ļ					

		MIller Catalyzer Corporation, Cataly	tic Conver	ter Series 60000, Gei	neral Motors P	assenger (Cars and I	LDT1 Trucks	, Up to 3,75	0 lbs. LVW		
No.	Model	Vehicle Model	Engine	Engine Family	Certification	Weight	Exhaust	Total	Converter	Monitored	Universal	Direct
140.	Year		Size		Level	Class	Туре	Converters	Туре	Momoreu	Universal	Fit
		Chevrolet Camaro, Buick Park Ave, Buick Regal	3.8L									
		Chevrolet Impala, Monte Carlo	3.4L					1				Í
		Chevrolet Malibu, Lumina	3.1L						TWC	1	60000	
73		Pontiac Firebird/Trans Am, Bonneville, Grand	3.8L	1GMXV03.8043	LEV	PC						
		Prix					S					TBD
		Pontiac Grand Am, Oldmobile Alero	3.4L									
		Pontiac Grand Prix. Buick Century	<u>3.1L</u>									
74		Oldsmobile Aurora	4.0L_	1GMXV04.6065								
		Seville, Eldorado, Deville, Limousine, Hearse	4.6L			·						L
				ACD (3/TOO 0100	r			·			<u> </u>	
75		S10 Pickup, Sonoma, Isuzu Hombre 2WD	2.27	2GMXT02.2122	LEV	LDT1						
76 77		Saturn Vue AWD	2.2L	2GMXT02.2123	TLEV							
78		Cavalier, Sunfire	2 21 /2 41	2GMXV02.2024								
78		Cavalier, Sunfire, Grand Am, Alero	2.2L/2.4L	2GMXV02.4022	4							
		Chevrolet Impala Police, Camaro, Pontiac	3.8L									
ļ		Firebird, Bonneville, Grand Prix, Buick Regal,	3.8L									
	2002	Park Avenue Chevrolet Impala, Monte Carlo, Pontiac Grand		2GMXV03.8043 2GMXV03.0063	LEV	PC	S	1	TWC	1	60000	TBD
79	2002	· ·	3.4L									TBD
19		Am, Oldsmobile Alero Chevrolet Malibu, Pontiac Grand Prix, Buick										
		Century	3.1L									
ļ		Oldsmobile Aurora, Intrigue	3.5L									
		Saab 9-5, Saab 9-5 Wagon	<u>3.0L</u>								ļ . '	
		Oldsmobile Aurora	4.0L		1							
80		Seville, Eldorado, Deville, Limousine, Hearse	4.6L	2GMXV04.6065								
نـــــــــــــــــــــــــــــــــــــ	<u> </u>	overne, Elastado, Devine, Ennouente, Heuse			<u> </u>						I	
81		Saab 9-3 Sport Sedan	2.0L	3GMXV02.0002	1							
		Cavalier, Sunfire, Grand Am, Alero			1							
82		Saturn LW200, L200	2.2L	3GMXV02.2025								
83		Saturn Ion		3GMXV02.2026]							
84		Saab 9-3 Sport Sedan	2.0L/2.3L		LEV	PC	S	1	TWC	1	60000	TBD
85		Saab 9-5, Saab 9-5 Wagon	3.0L]							
86		Malibu, Century, Grand Prix, Regal	3.1L	3GMXV03.8043]] [
87		Aurora	4.0L	3GMXV04.6065]							I
0/		Seville, Eldorado, Deville, Limousine	4.6L									