MOVES4: CHEAT SHEET (Nonroad)

Fuel Type

ID	fuelType
1	Gasoline
3	Compressed Natural Gas (CNG)
4	Liquefied Petroleum Gas (LPG)
23	Nonroad Diesel Fuel
24	Marine Diesel Fuel

Activity Type

ID	Activity Type
2	Source Hours
6	Population
9	Average Horsepower
12	Load Factor
12	Load Factor

Emission Process

ID	Process Name				
1	Running Exhaust				
15	Crankcase Running Exhaust				
18	Refueling Displacement Vapor Loss				
19	Refueling Spillage Loss				
20	Evap Tank Permeation				
21	Evap Hose Permeation				
30	Diurnal Fuel Vapor Venting				
31	Hot Soak Fuel Vapor Venting				
32	Running Loss Fuel Vapor Venting				

Horsepower Range Bin

ID	Horsepower Range					
1	0 <	hp	≤ 1			
3	1 <	hp	≤ 3			
6	3 <	hp	≤ 6			
11	6 <	hp	≤ 11			
16	11 <	hp	≤ 16			
25	16 <	hp	≤ 25			
40	25 <	hp	≤ 40			
50	40 <	hp	≤ 50			
75	50 <	hp	≤ 75			
100	75 <	hp	≤ 100			
175	100 <	hp	≤ 175			
300	175 <	hp	≤ 300			
600	300 <	hp	≤ 600			
750	600 <	hp	≤ 750			
1000	750 <	hp	≤ 1000			
1200	1000 <	hp	≤ 1200			
2000	1200 <	hp	≤ 2000			
3000	2000 <	hp	≤ 3000			

Mobile Sources Type						
				Sector		
			Equipment Sector	SCC Pattern	Nonroad Sector ID	
			Recreational	22FF 001 0zz	1	
_	▼		Construction	22FF 002 0zz	2	
	Fueltype/Engine	Туре	Industrial	22FF 003 0zz	3	
FF	Description	Nonroad	Lawn/Garden	22FF 004 0zz	4	
ГГ	Description	FuelType	Agriculture	22FF 005 0zz	5	
	Gasoline / 2-Stroke	1	Commercial	22FF 006 0zz	6	
60	6 1: /461 1	1	Logging	22FF 007 0zz	7	
	Gasoline / 4-Stroke		II			
65	LPG	4	Airport Support	22FF 008 005	8	
65 67	,	4	Airport Support Underground Mining	22FF 008 005 22FF 009 010	8 9	
65 67 68	LPG	•				
60 65 67 68 70	LPG CNG	3	Underground Mining	22FF 009 010	9	

Pleasure Craft and Rail Equipment Fueltype/EngineType							
xxx	Sector	Description	Nonroad FuelType				
005	Pleasure Craft	Gasoline / 2-Stroke	1				
010	Pleasure Craft	Gasoline / 4-Stroke	1				
020	Pleasure Craft	Marine Diesel Fuel	24				
003	Railroad Equip.	Gasoline / 2-Stroke	1				
004	Railroad Equip.	Gasoline / 4-Stroke	1				
006	Railroad Equip.	LPG	4				
008	Railroad Equip.	CNG	3				
002	Railroad Equip.	Off-highway Diesel	23				



MOVES4: CHEAT SHEET (Nonroad)



Nonroad Equipment Types

ID	Sector	Description	ID	Sector	Description	ID	Sector	Description	ID	Sector	Description
10	ID	Description	"	ID	Description	"	ID	Description	"	ID	Description
1	1	Snowmobiles	23	2	Dumpers/Tenders	45	4	Rear Engine Riding Mowers (com)	67	6	Gas Compressors
2	1	Offroad Motorcycles	24	2	Other Construction Equipment	46	4	Front Mowers (com)	68	6	Welders
3	1	All Terrain Vehicles	25	3	Aerial Lifts	47	4	Shredders < 6 HP (com)	69	6	Pressure Washers
4	1	Golf Carts	26	3	Forklifts	48	4	Lawn & Garden Tractors (res)	70	6	Hydro Power Units
5	1	Specialty Vehicle Carts	27	3	Sweepers/Scrubbers	49	4	Lawn & Garden Tractors (com)	71	7	Chain Saws > 6 HP
6	2	Pavers	28	3	Other General Industrial Eqp	50	4	Chippers/Stump Grinders (com)	72	7	Shredders > 6 HP
7	2	Tampers/Rammers	29	3	Other Material Handling Eqp	51	4	Commercial Turf Equipment (com)	73	7	Forestry Equipment
8	2	Plate Compactors	30	3	ACRefrigeration	52	4	Other Lawn & Garden Eqp. (res)	74	8	Airport Support
9	2	Rollers	31	3	Terminal Tractors	53	4	Other Lawn & Garden Eqp. (com)	75	10	Other Oil Field Equipment
10	2	Paving Equipment	32	4	Lawn mowers (res)	54	5	2-Wheel Tractors	76	2	Scrapers
11	2	Surfacing Equipment	33	4	Lawn mowers (Com)	55	5	Agricultural Tractors	77	2	Excavators
12	2	Signal Boards/Light Plants	34	4	Rotary Tillers < 6 HP (res)	56	5	Combines	78	2	Graders
13	2	Trenchers	35	4	Rotary Tillers < 6 HP (com)	57	5	Balers	79	2	Off-highway Trucks
14	2	Bore/Drill Rigs	36	4	Chain Saws < 6 HP (res)	58	5	Agricultural Mowers	80	2	Rough Terrain Forklifts
15	2	Concrete/Industrial Saws	37	4	Chain Saws < 6 HP (com)	59	5	Sprayers	81	2	Crawler Tractor/Dozers
16	2	Cement & Mortar Mixers	38	4	Trimmers/Edgers/Brush Cutter (res)	60	5	Tillers > 6 HP	82	2	Off-Highway Tractors
17	2	Cranes	39	4	Trimmers/Edgers/Brush Cutter (com)	61	5	Swathers	83	4	Commercial Mowers
18	2	Crushing/Proc. Equipment	40	4	Leafblowers/Vacuums (res)	62	5	Other Agricultural Equipment	84	9	Underground Mining
19	2	Rough Terrain Forklift	41	4	Leafblowers/Vacuums (com)	63	5	Irrigation Sets	85	11	Outboard
20	2	Rubber Tire Loaders	42	4	Snowblowers (res)	64	6	Generator Sets	86	11	Personal Watercraft
21	2	Tractors/Loaders/Backhoes	43	4	Snowblowers (com)	65	6	Pumps	87	11	Inboard/Sterndrive
22	2	Skid Steer Loaders	44	4	Rear Engine Riding Mowers (res)	66	6	Air Compressors	88	12	Railway Maintenance

Nonroad Sector

ID	Sector	ID	Sector
1	Recreational	7	Logging
2	Construction	8	Airport Support
3	Industrial	9	Underground Mining
4	Lawn/Garden	10	Oil Field
5	Agriculture	11	Pleasure Craft
6	Commercial	12	Railroad Equipment

