

No.RW-24011/5/93-RMP

Dated, the 30th December, 1993

To

The Secretaries, PWDs of all States and UTs (dealing with National Highways); Director General (Works), Central Public Works Department; Secretary, Border Road Development Board

Subject: Revision of norms of economic life of Road/Bridge construction machines belonging to this Ministry

I am directed to say that Ministry vide letter No.RM-21(3)/ 75 dated 4th June, 1976 had intimated to the States the calculation procedure of hire charges of Central machinery, under which the economic life of machine to be adopted for calculation purpose was enclosed. It has been experienced that the prescribed working life of road marking machines could not be achieved due to various reasons.

2. Subsequently matter was referred to the "Standing Committee of Senior Mechanical Engineers in the Highway Sector". The recommendations made by the members of Standing Committee were discussed in detail in the meeting held at Guwahati in May 1993 and economic life of various machines have been finalised.

The recommendations of the Standing Committee have been examined in this Ministry and it has been decided that for Ministry's machines available in the States, economic life for condemnation of Central machines will be as indicated below:-

- a) The economic life of Road/Bridge construction machines may be adopted as per attached Appendix 'I'. The life achieved either in years or kms/hours whichever is later will be taken for condemnation purpose of central machines available in respective States/U.T's.
- b) The formula shown in Appendix II may only be adopted for exceptional cases for calculation of average life of machines, which are of obsolete model and for which spares are not readily available and if their further repairs are considered not economical.
- c) The proposed revised life may be taken into account for working out hire charges of new equipment.
- d) This circular takes effect from 1.1.1994.

Appendix-I

Ministry's Circular No. RW-24011/5/93-RMP dated 30.12. 1993

ECONOMIC LIFE OF ROAD/BRIDGE CONSTRUCTION EQUIPMENT

S.No.	Name of Machine	Years	Km/Hrs.
I. BITUMINOUS CONSTRUCTION EQUIPMENT			
1.	Hot Mix Plants (below 20 TPH)	12	9000 hrs.
2.	Hot Mix Plants (above 20 TPH)	12	9000 hrs.
3.	Drum Mix Plants	12	9000 hrs.
4.	Paver Finisher	15	9000 hrs.
5.	Bitumen Boilers	10	-
6.	Bitumen Pressure Distributor/ Bitumen Transportation Tanker	12	9000 hrs.
7.	Bitumen Storage Tank	10	-
8.	Asphalt mixer	12	8000 hrs.

S.No.	Name of Machine	Years	Km/Hrs.
9.	Front End Loader (Wheeled)	15	9000 hrs.
10.	Tippers	12	2,40,000 km
11.	Chip Spreader	10	-
II. HEAVY EARTH MOVING EQUIPMENT			
1.	Dozer wheeled	15	9000 hrs.
2.	Dozer Crawler	15	9000 hrs.
3.	Motorised scraper/Towed scraper	15	9000 hrs.
4.	Motor Grader	15	9000 hrs.
5.	Excavator upto 1 cum	12	1000 hrs.
6.	Mobile Crane	15	8000 hrs.
7.	Dumper (all size)	12	10000 hrs.
8.	Tractor (Wheeled)	12	10000 hrs.
9.	Grab Dredging Cranes	12	9000 hrs.
III. COMPACTION EQUIPMENT			
1.	Road Roller 8-10 T	15	12000 hrs.
2.	Sheepfoot Roller	15	-
3.	Vibratory Rollers upto 2 tons WT	10	-
4.	Vibratory Rollers above 2 tons WT	12	10000 hrs.
5.	Tandem Vibratory Roller 8-10 T	12	10000 hrs.
6.	Pneumatic Tyred Rollers	12.	10000 hrs.
IV. BRIDGE CONSTRUCTION EQUIPMENT			
1.	Bridge Inspection Unit		
	(a) Bucket type	15	-
	(b) Plateform type	18	-
2.	Power Winch	15	8000 hrs.
3.	Concrete Mixer	6	-
4.	Pile Driving Set	12	8000 hrs.
5.	Diamond Core Drill pm/c	12	8000 hrs.
6.	Vibrators (all types)	5	-
7.	Air Compressor	12	9000 hrs.
8.	Pumping Set Diesel (upto 10 HP)	8	-
9.	Pumping Set Diesel (above 10 HP)	12	10000 hrs.

S.No.	Name of Machine	Years	Km/Hrs.
10.	Weigh Bridges	12	-
V. GENERAL PURPOSE			
1.	Truck	12	2,40,000 km
2.	Stone Crusher/Granulator (Electrical)	15	12000 hrs.
3.	Stone Crusher/Granulator (Diesel)	12	10000 hrs.
4.	Generator Set	12	10000 hrs.
5.	Diesel Welding Set	15	10000 hrs.
6.	Jeep/Car/Station Wagon/Mini Bus	10	2,00,000 kms.
7.	Ferry-Boats-Steel	15	-
	-Wooden	10	-
8.	Kerb Laying Machine	12	-
9.	Concrete Transit Mixer	12	10000
10.	Concrete Pump	10	-
11.	Concrete Batching & Mixing Plant	15	12000
12.	Concrete Paving Equipment	15	12000
13.	Stone Crushing & Screening Unit	10	10000
14.	Snow Cutter/Plougher	20	

Appendix-II

Ministry's Circular No. RW-24011/5/93-RMP dated 30.12.1993

**FORMULA TO BE ADOPTED FOR CONDEMNATION OF ROAD/BRIDGE
CONSTRUCTION MACHINES**

- i) Recommended life of machine - X Hours/kms
- ii) Cumulative life actually achieved by the machine - A Hours/kms
- iii) Recommended life of machine in years - Y Years
- iv) Number of years the machine is old (taking year of purchase into consideration) - B Years
- Then life for condemnation $A/X + B/Y = /2 \times 100\%$
- Say = - %

Note:- If life calculated as per above formula is more than 100% the machine may be considered for condemnation.