### (Modified upto 30<sup>th</sup> September, 1984) G. N., I. & L.D., No.IBA-1063/Lab.III, dated 1<sup>st</sup> April, 1966 (M. G., Pt. I-L, p. 1179)

In exercise of the powers conferred by section-29 of the Indian Boilers Act, 1923 (Act V of 1923), and of all other powers enabling it in that behalf, the Government of Maharashtra hereby makes the following Rules, the same having been previously published, as required by sub-section (1) of section-31 of the said Act:-

#### **CHAPTER I**

#### **PREELIMINARY**

- 1. **Short title and extent** (a) These Rules may be called the Maharashtra Economiser Rules, 1965.
  - (b) They extend to the whole of the State of Maharashtra.
- 2. **Definitions**—In these Rules, unless the context requires otherwise—
  - (a) "Act" means the Indian Boilers Act, 1923;
  - (b) "Regulations" means the Indian Boiler Regulations, 1950, made by the Board under section-28:
  - (c) "section" means a section of the Act.
- 3. **Payment of fees**—All fees payable under the Act and these Rules shall be deposited by the payer in a Government Treasury or the Reserve Bank of India, in the State of Maharashtra.
- 4. **Registers :-** (1) The Director shall keep in his office—
  - (a) a register in Form AE of all economisers registered in the State;
  - (b) the Registration Books and Memorandum of Inspection Books in respect of all economisers entered in such registers;
  - (c) a register of appeals;
  - (d) a register of accidents; and
  - (e) a register of fees received for registration and for the issue of renewed certificates.
  - (2) The register maintained under clause (a) of sub-rule (1) shall consist of two parts. In Part-I shall be entered the economisers registered in the State and in Part II shall be entered the economisers transferred from another State.
- **5. Inspection at special times :-** No examination of an economiser shall be made by an Dy. Director for the purpose of registering or issuing a certificate for an economiser on a Sunday or gazetted public holiday or between the hour of sun-set and sun-rise without the specific order of the Director in each case. In such cases, an extra fee equal to the usual fee for the registration or inspection of the economiser, as the case may be, shall be charged and half of the extra fee paid to the Dy. Director.

#### **CHAPTER II**

#### PREOCEDURE FOR REGISTRATION AND INSEPCTION

- **6. Receipt of application:** An application for registration under sub-section (1) of section-7 shall be made to the Dy. Director of the local area in which the economiser is situated and shall be accompanied by a receipt for the payment of the fee prescribed in regulation-533 of the regulations.
- **7. Procedure on transfer of an economiser unit or part of a unit**:- Whenever an economizer is transferred to the State of Maharashtra from any other State, the owner shall report such transfer to the Director as required by clause (b) of section-6 and apply for the registration of the transfer the economiser shall not be used until registration has been effected. No fees shall be charged for recording such transfer.
- **8. Entry of transferred economiser unit in register :-** (1) On receipt of the Registration and Memorandum of Inspection Books in respect of such transferred economiser, the Director shall enter the economiser unit under its original number in Part II of the register in Form AE.
  - (2) When parts of two or more units are assembled to form one unit, the original numbers shall be cancelled and the newly built up unit shall be given a fresh number.
- **9. Note of transferred and dismantled economisers :-** Whenever an economiser or part of an economiser has been transferred to another State or broken up, the fact shall be noted in the Register. In the case of an economiser which has been condemned the Registration Book and the Memorandum of Inspection Book shall contain an entry to that effect.
- **10.Entries in certificates :-** In addition to the entries required to be made under regulation -530 in a certificate for an economiser, the Dy. Director shall state in the remarks column his retirements, if any with regard to hydraulic test, removal of lagging brickwork or other concealing part for the next inspection to enable the owner to have the same properly prepared at that time. He shall also state in the same place his requirements regarding the repair or renewal of any part that may be considered fit only for the period of the certificate.

In the repairs column shall be entered the year of repair and description of the repair effected. Only important repairs shall be noted.

**11. Engraving of registry number:** - Paper slips of the proper size bearing the registry number allotted for the economiser shall be supplied by the Director. The engraving of the registry number shall be made as prescribed in regulation-534.

- **12. Issue of certificate and provisional order:** In cases in which the Dy. Director is empowered to issue a certificate under section-8 without further reference the certificate shall ordinarily be issued within 48 hours of the completion of the inspection. Where the Dy. Director proposed to issue a provisional order under section-9 pending the issue or refusal of the certificate, he shall satisfy himself that the economiser is fit to be worked at the minimum pressure and for the period entered in the provisional order. The fact of the issue of a provisional order shall be reported immediately to the Director.
- **13. Forms of provisional orders and certificates**: Provisional orders and certificates are prescribed in Forms-X and XI, respectively of the Regulations.

The period specified in any provisional order or certificate shall begin on the day on which the thorough inspection or hydraulic test is completed. Where a certificate supersedes a provisional order during the period of its currency, the period of the certificate shall be retrospective and shall begin from the same date as that of the provisional order.

- **14.Duplicate certificate** :- A duplicate of a certificate under section-7 or renewed certificate under section-8 or a provisional order granted under section-9 which for the time being is in force, shall be granted by the Director on the application of the owner of the economiser, if the Director is satisfied that the duplicate is required for a bonafide purpose and a fee of rupees fifty in paid.
- **15.Registration fees**: Fees for registration shall be such as are prescribed in regulation- 533 of the regulation.
- **16. Inspection fees for renewal of certificates**:- Fees for inspection of economiser for renewals of its certificate shall be levied in accordance with the following scale:-

	Rs.
For an economiser rating not exceeding 50 square meters	500
For an economiser rating not exceeding 50 square meters, but not exceeding	600
100 square meters.	
For an economiser rating not exceeding 100 square meters, but not exceeding	700
150 square meters.	
For an economiser rating not exceeding 150 square meters, but not exceeding	800
200 square meters.	
For an economiser rating not exceeding 200 square meters, but not exceeding	900
250 square meters.	
For an economiser rating not exceeding 250 square meters, but not exceeding	950
300 square meters.	
For an economiser rating not exceeding 300 square meters, but not exceeding	1000
350 square meters.	
For an economiser rating not exceeding 350 square meters, but not exceeding	1100
400 square meters.	
For an economiser rating not exceeding 400 square meters, but not exceeding	1200

450 square meters.	
For an economiser rating not exceeding 450 square meters, but not exceeding	1300
500 square meters.	
For an economiser rating not exceeding 500 square meters, but not exceeding	1400
600 square meters.	
For an economiser rating not exceeding 600 square meters, but not exceeding	1500
700 square meters.	
For an economiser rating not exceeding 700 square meters, but not exceeding	1600
800 square meters.	
For an economiser rating not exceeding 800 square meters, but not exceeding	1700
900 square meters.	
For an economiser rating not exceeding 900 square meters, but not exceeding	1800
1000 square meters.	

For an economiser rating exceeding 1000 square meters, an additional fee of Rs.100 for every 200 square meters or part thereof, in excess of 1000 square meters, shall be charged.

Provided that, when any owner is willing to accept a renewal of certificate for less than 24 months, in order to approximate the date of Bi-annual inspection, to the date on which other economisers in the locality as may be necessary for such approximation of such dates, may be granted at the rate of usual inspection fees.

- **16-A :- Examination fees for plans of economisers** :-Fees for examination of plan for economiser showing the particulars of materials, design and construction, shall be on the scales prescribed in Regulation-553 subject to maximum of three hundred rupees. When a plan which has been scrutinized, and in respect of which alterations have been suggested is resubmitted for scrutiny, a separate fee on the same scale shall be payable if the plan contains alterations other than those previously suggested.
- **16-B-Insepction fees for economiser under construction**: Inspection fee for economiser under construction shall be calculated at the following scale :-
  - (i) Four times the inspection fees of economiser of steel construction.
- **16-C- Inspection fees for economiser tubes under manufacture** :- Fees for inspection of economiser tubes under manufacture shall be 50 rupees per tube subject to a minimum of three hundred rupees.
- **17.Special fee for inspection out of season**:- (1) For inspections carried out on application made before the date of expiry of a certificate, no traveling and halting charges of the Dy. Director and staff shall be leviable.
  - (2) In cases where the owner requires the inspection at any date prior to the expiry of the certificate, the Director may, in addition to the inspection fee, charge the traveling and halting charges from the owner of the economiser. If an owner applies for inspection after the expiry of his certificate, he shall be liable

- to pay the traveling allowance and halting allowance of the Dy. Director at the discretion of the Director.
- (3) If the inspection is carried out at the request of the owner on a date other than the one specified by the Dy. Director, to suit the convenience of the owner, the traveling charges of the Dy. Director shall be realised from the owner.
- **18.Refund of fees :-** Any fee paid in excess and any fee paid for an inspection which, for any reason (such reason not due to any fault or omission on the part of the owner of the economiser) has not been made, shall be refunded or adjusted, if an application therefor is made within one year from the date of payment.

#### **CHAPTER III**

#### PROCEDURE FOR INSPECTION

- **19. Internal inspection of Economiser Chamber**: Detailed Instructions for the inspection of economisers are contained in Chapter XI of the Regulations. The following general procedure at inspection shall be observed, namely:-
  - (a) At a thorough inspection of an economiser, the Dy. Director shall, wherever possible, have either the steel casing doors opened or the brick work completely removed on the outside of the economiser chamber to enable him to make a thorough examination of the external surfaces of the tubes. But before doing so, he shall satisfy himself that proper provisions have been made to isolate the economiser on the gas side as will as on the water connections of the boiler and from any other working economiser.
  - (b) Should the Dy. Director find that the economiser has not been disconnected on the feed line or is not sufficiently sealed on the gas side or is unreasonably hot or not properly cleaned or sealed, he shall decline to proceed with inspection and report the facts to the Director for orders under sub-section (2) of section-14.
  - (c) When an economiser chamber is of such a size or its construction is such that the Dy. Director cannot go inside it, reasonable, provisions shall then be made for the external examination of the principal parts. If for any reason the Dy. Director cannot examine it, he shall report the facts to the Director for orders.
- **20. Preparation for Hydraulic Test :-** (a) The chest of all mountings, subject to the water pressure, shall be in place and shut tight or blank flanged. The relief value shall either be secured or removed and the chest opening blank flanged. The attachment for the Dy. Director's pressure gauge and the nipple for connecting the Dy. Directors' test pump hose shall be in order. All caps shall be properly fitted and tightened up. The economiser shall be completely filled with water, care being taken to allow all air to escape, and if possible, a preliminary test not exceeding the working pressure of the economiser, shall be taken before the Dy. Director visits to test the tightness of the joint. When an economiser is hydraulically tested it shall be offered entirely bare.

(b) Hydraulic tests of economiser shall be made after the inspection. The test pressure to be applied to economisers at such subsequent examinations shall be from one and a quarter to one and a half times the working pressure of the economiser:

Provided that the Director may, at his discretion, waive the requirement of hydraulic test of an economiser, if he deems fit.

- **21. External inspection of economiser :-** (a) After the economiser has been cleaned, the Dy. Director shall make a thorough examination so far as its construction permits. The external condition of the tubes shall be carefully noted for wasting especially at the feed inlet end and all accessible tubes shall be calipered. The internal surfaces of cast iron tubes shall be calipered as far as possible and shall be closely observed for graphitic wasting. In the event of any failure, these shall be broken up for scrutiny, so that the general internal condition of the other tubes may be estimated.
  - (b) Where tubes or other parts are wasted, the strength shall be recalculated.
  - (c) The scraper gear shall be examined to note if any parts are missing, if the length of travel is adequate and if the scrapers are correctly adjusted.
  - (d) All cap bolts are to be inspected, also the condition and position of the damper and baffles.
  - (e) The record of each inspection and calculation shall be entered in the memorandum of Inspection Book.
- **22.Casual inspections**:- The Dy. Director shall note if the economiser is working satisfactory and especially in accordance with the regulation-531 of the Regulations. Particular note shall be taken of the satisfactory working of the scrappers and of the water temperature to see that the maximum outlet water temperature of the economiser shall be at least 40° F below the saturated steam temperature in the boiler.
- **23. Proposal for reduction of pressure :-** When the Dy. Director decide that an economiser in one or more of its parts in no longer fit for the pressure approved for it, he shall, without delay, report his proposals for reducing the pressure to the Director.
- **24. Repairs to economisers :-** (1) No pressure parts in a cast iron from economiser shall be permitted to be repaired by welding.
  - (2) Casting shall not be repaired or welded without the specific sanction of the Inspecting Officer. If required, the castings shall be suitably reheat-treated to remove internal stresses. Should a defect impair the strength of the casting, repair by welding or otherwise shall not be permitted.
- **25. Entries in Memorandum of Inspection Books**:- (1) The Dy. Director shall, [after an inspection, make the necessary entries in the Memorandum of Inspection book for the economiser and submit the book to the Director.
  - (2) Inspection notes shall briefly state the following facts, namely:

- (a) the extent to which economisers were cleared of brick-work, lagging or cancelling parts;
- (b) The general condition of the economisers; and
- (c) parts requiring attention or repair and if special preparation is required at the next inspection.
- (3) The Dy. Director shall also note in the Memorandum of Inspection book all casual visits for inspection of feed pipes, visits for inspection of repair, inquiry into accidents and other like matters.
- **26.Arranging for inspections :-** In arranging for inspections and hydraulic test, a written notice of not less than thirty days shall be given to the owner concerned.
- **27. Fee to cover inspection and test :-** A fee paid for the inspection of an economiser shall cover through inspection and hydraulic test subject to the provision of sub-section(2) of section-14.
- **28.** A second fee in default: A second fee shall be leviable for reinspection in any case where the inspection of an economiser is begun, but owing to the fault or neglect of the person-in-charge, is not completed within the period of six months from the date of commencement of the inspection; provided that no extra fee shall be levied, except with the sanction of the Director.
- **29. Fee for copy of registration book**: The fee for copy of registration book, excluding inspection notes and calculations, shall be rupees 100.

#### **CHAPTER IV**

#### **ACCIDENTS**

- **30. Inspection of accidents** :- On receipt of a report of an accident to an economiser or feed pipe under section-18, the Dy. Director shall with the least possible delay, proceed to the place to investigate the accident. If the report is received by the Director, he shall forward it at once to the Dy. Director within whose jurisdiction the accident has occurred for necessary action.
- **31. Procedure during inquiry**:- The Dy. Director shall make a careful examination of the damaged parts and shall take such measurements and make such sketches for the purpose of his report as he may deem necessary. He shall inquire into the circumstances attending the accident and note the time of its occurrence, its nature and extent, any injury caused to persons and damage done to the property. The report shall be in Form CE and shall be sent forthwith to the Director. If the Director is satisfied with the investigation, he will record the facts in the register of accidents and enter a brief account of the accident in the Registration Book, a copy thereof being made in the Memorandum of Inspection Book. If however, the accident is of a serious nature and in all cases in which an

explosion has occurred, the Director, if he deems fit after receipt of the Dy. Director's report, may proceed to investigate the accident personally.

- **32. Power to hold inquiry in writing**: Dy. Directors are authorized to take written statements of witnesses and all persons immediately concerned with the accident. In order to comply with the provisions of sub-section (2) of section-18, the Dy. Director shall present to the owner or person in charge of the economiser a series written questions on all points that are material to the inquiry.
- **33. Use of economiser after accident**:- The Dy. Director shall decide whether the use of the economiser may be permitted at the same or at a lower pressure without repairs or pending the completion of any repairs or alterations that he my order. In no case shall he issue a provisional order or renewed certificate, until his orders have been carried out.
- **34. Reference in Annual Report :-** A brief account of all accidents, their causes and remedial measures taken shall be included in the Director's annual report.
- **35. Unreported accidents** :- If in the course of an inspection or at any other time the Dy. Director discovers damage which comes within the definition of an accident but which has not been reported, he shall report the facts at once to the Director for such action, as he deems fit.

#### **CHAPTER V**

#### **APPEALS**

- **36. Constitution of Appellate Authority** :- (1) The Appellate Authority to be constituted under section-20 shall consist of a President, and six Assessors appointed by the State Government.
  - (2) The President and Assessors shall hold office for such period as the state Government may specify in this behalf.
- **37. Qualification of President and Assessors** :- (1) A person to be appointed as the President of the Appellate Authority shall be one—
  - (i) who is holding or has held any judicial office not lower in rank than that of a Civil Judge or Magistrate of the First Class or any office which , in the opinion of the State Government, is an equivalent office.
  - (ii) who is an advocate enrolled under the Advocates Act, 1961.
  - (iii) an attorney of a High Court; or
  - (iv) a pleader enrolled under the Bombay pleaders Act, 1920.
  - (2) A person to be appointed as an Assessor shall be a fully qualified mechanical engineer.

- **38.Remunaration of Assessors** :- An Assessor shall be paid—
  - (a) such fees as the State Government may, from time to time, determine, and
  - (b) the traveling expenses actually incurred by him for attending an enquiry under these rules or traveling allowance at the scale prescribed for a member of a State Committee or Board under rule-1 in section-1 of Appendix-XLII-A to the Bombay Civil Services Rules, 1959 whichever is less.
- **39. Attendance of Assessors:** Where a date for an appeal before the appellate authority has been fixed, the Director shall under the orders of the President of the Appellate Authority, arrange for the attendance of all the Assessors.
- **40.Filing of appeals**: Every appeal shall be made to the Director in writing either in English or in the regional language of the place where the economiser is situated.
- **41. Presentation of appeal**:- The petition of appeal may be presented, either personally or sent by registered post, to the Director.
- **42. Form of appeal**:- The appeal shall be accompanied by the original order, notice or report appealed against or by a certified copy thereof or where such order, notice or report has been made in writing by a clear statement of the facts appealed against, the grounds of appeal and section under which the appeal is made.
- **43.Procedure before hearing**:- when the date for hearing has been fixed, the Director shall at once issue a notice to the appellant, stating the date for hearing and informing him that if he wishes to be heard in support of the appeal or to produce evidence he shall be present either in person or by authorised agent, with his evidence on the date fixed. The notice shall be sent by registered post to such address as is entered in the petition of appeal.
- **44. Attendance of Dy. Director during hearing of appeals** :- (1) In an appeal to the Director he shall decide whether the presence of the Dy. Director is necessary and shall issue orders accordingly.
  - (2) Under orders of the Director, Dy. Directors shall attend before the Appellate Authority, during the hearing of appeals with regard to economisers under their charge.
- **45. Attendance of witnesses before Appellate Authority** :- The Appellate Authority shall have power to secure the attendance of witnesses and to make local inquiries under the provisions of the Code of Civil Procedure, 1908.
- **46. Ex parte decision** :- In any appeal, if the appellant is not present on the date fixed the appeal may be decided ex parte.

- **47. Costs in appeals to Appellate Authority** :- (1) Where an appeal is dismissed the Appellate Authority may fix the costs of the appeal which shall be payable by the appellant.
  - (2) In any appeal where a local inspection is required, the appellant shall deposit in advance, full costs of such inspection as determined by the President of the Appellate Authority.

#### **CHAPTER VI**

#### **GENERAL**

- 48. The owner of an economiser shall not use, permit it to be used, unless the competent person-in-charge of the boiler is placed in charge of such economiser.
- **49. Penalty :-** Any person contravening any of these rules shall be punishable, in the case of a first offence, with fine which may extend to one hundred rupees, and in the case of any subsequent offence, with fine which may extend to one thousand rupees.
- **50. Repeal** :- The Bombay Economiser Rules, 1958 are hereby repealed, except as respects things done or omitted to be done before such repeal.

# APPENDIX FORM AE

(Rules 4 & 8)

## MAHARASHTRA ECONOMISER INSPECTION DEPARTMENT

## Register of Economisers

Registry No.	Type of economiser	Economiser rating	Name of manufacturer	Year and place of construction	Date of registration	Name of owner	Place where in use	Remarks, Transfers etc.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

## FORM CE

## ( See rule 31)

Report into the investigation of the accident to Economiser No.

To,						
	The D	irector of B	Boilers,			
Sir,						
	ent and		stances atte		-	eliminary inquiry into the iser Noand now
	(1) Da	ate and plac	ce of accider	ıt,		
	(2) Da	ate of invest	tigation.			
	(3) Na	ame and Ad	ldress of Ow	ner (s),		
	(4) Pe	ersons killed	d and/or inj	jured,		
	(5) Na	ame of mak	ers of Econo	omisers or s	team pip	pe,
	(6) Ag	ge of Econo	miser or ste	am pipe,		
	(7) Pa	rticulars of	f previous re	epairs with o	dates,	
	(8) Na	ature of acc	ident,			
	(9) Ca	use of accid	dent,			
	(10)	General re	emarks.			
Date :						Dy. Director of Boilers
Rema	rks by t	the Directo	r			