Circular No. 33/2001-Cus.

4th June, 2001

F.NO.405/09/2000-CUS.III

Government of India

Ministry of Finance

Department of Revenue

Central Board of Excise & Customs

Subject : Parameters and facilities for testing furnace oil / waste oil -regarding

I am directed to invite your attention to Board's Circular no. 106 dated 22.12.2000 issued from F.No. 405/09/2000-Cus. interalia enclosing the minutes of meeting of experts organized by Ministry of Environment to lay down certain guidelines for testing of fuel oil, LSWR & LSHS. From the feedback received, from the field formations certain doubts were raised regarding the testing parameters prescribed in the aforesaid Board's Circular and the matter was taken up with Ministry of Environment & Forests & other expert agencies(IOC Ltd., IIP Dehradun etc.) for issue of further clarification / instructions . The doubts raised and parameters / procedure for testing fuel oils and off-specification products imported into the country were discussed and critically further reviewed in a meeting held on 09-03-2001 in the Ministry of Environment & Forests, which was attended by experts from various reputed research laboratories.

After deliberations, stepwise procedure to be followed to determine whether an imported consignment is to be categorized as a fuel oil or off-specification product and further to classify an off-specification products as (i) off-specification fuel oil (ii) waste/used oil fit for re-refining and (iii) hazardous wastes whose imports were prohibited. A copy of the minutes of the meeting laying down these guidelines is enclosed for your guidance and necessary further action. In continuation of the earlier minutes essentially this is a further elaboration of the testing procedures etc., mentioned in the first minutes communicated in December , 2000 .

Briefly , as you would observe, the following broad stepwise procedure has been laid down.

The product imported should be subject to certain minimum screening tests for acidity, ash contents, sediment and water to consider whether any imported product is a regular grade furnace oil or fuel oil and these should be classified as off-specification furnace oil or waste oil. The prescribed limits being as follows :-

1.

S.No.	TEST	PRESCRIBED LIMIT (MAX.)
1.	Acidity (inorganic)	Nil
2.	Ash Content	0.1%
3.	Sediment	0.25%
4.	Water	1%

2. Products / furnace oil which fail the screening test should be classified as off specification furnace oil / waste oil .

3. Products / furnace oil which pass the above screening test should be subject to further testing for the remaining BIS specifications . The products should be first tested for viscosity . Products / furnace oil which has a viscosity greater than 370 centistokes at 50 degree centigrade should be classified as off specification furnace oil / waste oil .

4. Products / furnace oil of viscosity below 370 centistokes should be categorized into the following four grades of fuel oils : (1) Viscosity upto 80 centistokes (Grade LV) , (2) Viscosity 80 to 125 centistokes (Grade MV 1), (3) Viscosity 125 to 180 centistokes (Grade MV 2) , and (4) Viscosity 180 to 370 centistokes (Grade HV) .

5. The above four grades could be tested for total sulphur per cent by weight (1) Grade LV viscosity up to 80 centistokes should confirm to a maximum of 3.5% suphur by weight .

(2) Grade MV1 viscosity 80 to 125 centistokes and Grade MV2 from 125 to 180 centistokes viscosity should confirm to a maximum total sulphur of 4% by weight .

(3) Grade HV from 180 to 370 centistokes viscosity should confirm to a maximum total sulphur of 4.5% by weight.

6. Products / furnace oil not to confirming to the respective sulpher percentage by weight shall be considered as off specification furnace oil / waste oil.

7. Products / furnace oil confirming to the sulphur percentage for the grades mentioned above should be further tested for flash point.

1. Products/furnace oil having less than 66 'C flash point should be considered as off specification furnace oil / waste oil.
2. Products / furnace oil having a minimum of 66 'C flash point should be further tested for calorific value

1. Products / furnace oil having calorific value less than 10,000 Kcal/Kg should be classified as off specification furnace oil/waste oil .
2. Products / furnace oil which has calorific value of at least 10,000 Kcal/Kg could be classified as furnace oil and its density could be reported as per the BIS specification requirements.

8. Off specification furnace oil / waste oil needs to be further tested to classify it into (1) off specification furnace oil , (2) waste / used oil fit for re-refining , and (3) hazardous waste.

9. The off specification/furnace oil/waste oil to may be subject to an organic halide test (AOX analyzer). [As CRCL is in the process of acquiring the AOX analyzers, this test be got done through other authorized Govt. / Private Laboratories for the time being] .

(i) Off specification furnace oil /waste oil indicating absence of organic halide should be further tested for heavy metals (may not be tested for PCBs). Samples conforming to heavy metal concentrations listed in Appendix 1 for re-refining could be re-refined and those not confirming should be classified as hazardous waste .

(ii) Products/furnace oil indicating presence of organic halide should be tested for PCBs.

(iii) Samples testing negative for PCBs but showing presence of organic halides should be tested for heavy metals . Samples confirming to heavy metal concentration listed in Appendix 1could be re-refined . Those not meeting the specifications laid down for heavy metals should be classified as hazardous waste.

10. Samples testing positive for organic halides and PCBs should be classified as hazardous waste .

The above procedure may be brought to the notice of all concerned for compliance . Board's Circular No. 106 dated 22.12.2000 stands modified to the above extent . Difficulties, if any, in following above procedure may be brought to the notice of the Board.

Please acknowledge receipt.

APPENDIX -1.

Used Oil Specification for Re-refining .

Constituents / Property	Acceptable Limits (Max.)
Colour	8
Water	15%
Density	0.85 to 0.95%
Flash point COC	Min. 94 Degree Centigrade
Kinematic Viscosity c St at 100 degree centigrade grades	1.0 to 32

Dilutents	15% Vol.
Neutralization No.	3.5mg KOH/g
Saponification value	18 mg KOH/g
Total halogen	4000 ppm
PCBs	Absent
Lead	100 ppm
As	5 ppm
Cd+Cr+Ni	500 ppm
PAH	6%