SPECIFICATIOIN AND ADDITIONAL REQUIREMENTS IN RESPECT OF DDT 50% WDP :-

50% DDT water Dispersible Powder Concentrate shall confirm to ISI Specification No.IS: 565 – 1984 (Third Revision) "The material shall be in the form of a homogeneous powder, together with fillars and adjuvants, either light violet or white to creamy in coloured shall wet readily mixing with water, providing a suspension suitable for use as spray". The DDT Technical use in the formulation of the stores shall conform to IS:563-1973 specifications (Second revision) of ISI.

- 2. ADDITIONAL REQUIREMENTS:-
- 2.1 Percent DDT Content: The average DDT content of all the samples drawn shall not be less than 50% in each lot offered for inspection. However, NVBDCP will accept the lots, otherwise found suitable, even if the average content of a lot is only 49% subject to the condition that the cost of any shortage in technical DDT content from the nominal 50 % in all the lots accepted during a year is recovered from the seller.
- 2.2 INSECTICIDES ACT:- The terms and conditions in the insecticides act of 1971 Rules framed under the Insecticides Act of 1968 (46 of 1968) with utp date amendments at the finalization of the contract will also be applicable.

## 2.3 FIELD SPRAY PERFORMANCE TEST:-

The material shall also satisfy the following field spray performance test. One composite sample made from samples drawn from a particular lot offered for inspection during a day shall be tested for the spray test. In case this composite sample fails to meet the requirements of the field shall be tested for the spray test.

A. 5% DDT suspension of sample shall be prepared in water and it will be sprayed on cement plastered virgin wall surface with either the standard stir up pump sprayer oor the hand compression sprayer used under the NVBDCP Programme, fitted with a nozzle, giving a discharge rate of 652 – 765 ml. Per minute and having an angle of discharge of 55-65 at 00.703-0 kg/Cm pressure. The nozzle of the sprayer is to be held at distance of 457 mm from the wall surface. The movement of the bozzle during the spraying shall be at the rate of 067 mm-1168mm per second. The spray obtained shall have uniform coverage at an angle of spray 55-65 at the above rate of discharge of the nozzle and pressure and the swath width on the wall surface shall be between 457 & 584 mm. There shall be no bubble formation and flow down on the wall surface. In addition, the above 50% DDT aqueous suspension shall be allowed to stand for 3 hours and after restirring, this aqueous suspension shall be sprayed again when it shall meet all the above requirements of the spray test. Further, the aqueous suspension after 3 hours standing shall not give a gelatinous and viscous mass setting down at the bottom of the bucket. The sediment shall be in the form of slurry or mass which shall go back into suspension with normal stirring.

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- 2.4 EXPIRY DATE: The expiry date i.e. the date upto which the insecticide shall retain its efficacy and safety shall be a period of two years from the date for indpection carried out immediately after its manufacture. This means that the material shall meet all the requirements specified in Annexure 'A' for a period of two years from the date of its first inspection. This shall be guarantted by the firm at the time of submitting their quotation.
- 2.5 PACKING: Specification for packing material for supplies of DDT 50% wdp to NVBDCP from M/s HIL to be as below:-
- 2.5.1. Double hessian bags bituminised and interlined with kraft paper and having loose polyethylene liner inside, with following specifications and measurement:-
- 2.5.2. SIZE OF REDOUBLE HESSIAN BAG:- 991x711 mm, having capacity of approximately 80 litres when packed with 50kgs net weight of DDT wdp concentrate. All the materials used in making the bag shall be new and of excellent quality (A- Grade). The stitchings of the finished bags shall be strong enough to withstand rough handling in rail /road transmit. After filling the bag with 50kgs net weight of 50% DDT wdp it shall be stitched with a strong and good quality thread which can withstand rough handling in rail/road transit.

## 2.5.3. BASIC CLOTH FOR THE HESSIAN BAGS:-

- 2.5.3.1. OUTER LAYER:- Hessian cloth conforming to specification for Indian Hessian No. IS:2818 (Part-V)- 1974 having minimum weight 298 g/m<sup>2</sup> at 16% contract moisture regain.
- 2.5.3.2. INNER LAYER:- Hessian cloth conforming to type II of clause 1.1 of IS:2818 (Part III) 1971 (Specification for Indian Hessian), having minimum weight of 270 g/m² at 14% contract moisture rate.
- 2.5.4 BITUMIN: The Bitumin shall conform to grade 90/15 of IS:702-1961 specifications for industrial bitumen (revised). Bitumin used on the Kraft paper shall withstand temperature upto 45 degree C and shall not melt or ooZ out from the hessian. The bitumen used shall be at the rate of 100g/m² on each side of the Kraft paper (i.e. total 200 g/m² on both sides of the Kraft paper).
- 2.5.5. KRAFT PAPER: The double hessian bags will be interlined with craft paper having minimum weight of 70 g/m² (Indian specification No. IS:1397-1967). The kraft paper interlining shall cover the entire area between the two hessian bags and bounded with bitumen at the rate of 100 g/m² each on both sides as state above (2,5,4).
- 2.5.6. STITCHINGS: Finished bags with stitchings shall be water proof and moisture proof. All the stitchings shall be strong enough to withstand rough handling in rail /road transit

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- 2.5.7. POLYETHYLENE INNER LINER:- The above double hessian bags shall further contain a loose polyethylene liner of size 1270 x 711 mm 300 guage thickness, made from good quality new polyethylene granules. After filling the bags with 50% wdp (50kg. net), the polyethylene liner shall preferably be sealed hermatically. In case the hermatical sealing is not possible, than the loose open and of the polyethylene liner shall be tightly tied with a strong twine or jute thread. The remaining part of the polythelyene liner (at least 10-12 cm) shall be twisted and folded. The folded and shall be again tied with a strong twine or jute thread so as to avoid outside moisture from entering the bags.
- 2.6 MARKINGS:- The double hessian bags shall be marked legible and indelibly with print stenciling with all the requirements given under clause 3.2 of the specification IS:565 /1984 in addition to the provisions under the above insecticides add such as batch No., date of manufacture, date of expiry etc. The date of expiry shall be stenciled prominently
- 2.7 BATCH SIZE:- The batch size shall be 1.0 MT for the Rasayani and Udyogamandal factories.
- DESPATCH DETAILS: The supplier shall send the dispatch details of the stores to the consignees as well as the Directorate of NVBDCP Delhi with the details of the batch numbers, Quantity dispatched against each batch number, the date of inspection and the date of expiry. A complete batch shall be despatched to the consignees and the serial numbers of the bags shall be in the running order.

In case the quantity to be dispatched is not the multiple of a complete batch, then the dispatched bags which make a part of a batch shall be in the running order after making use of complete batches. In all cases dispatches shall be made as "first approved first dispatched" basis.

- 2.9 SAMPLING AND TESTING: The sampling and testing at Udyogamandal and Rasayani shall be conducted by the NVBDCP Research Officer posted there.
- 2.10 COMPLAINT REGARDING SUB-STANDARD MATERIAL AND REPLACEMEN T: Any complaint by NVBDCP consignees within the expiry period in respect of material supplied by M/s HIL is to be made to M/s HIL and the Insecticides Board constituted under the Insecticides Act to take necessary action against M/s HIL. The inspection and Testing of the disputed lots, if any, lying with consignees (within the expiry period) shall be done by NVBDCP, Delhi in the presence of the representative of M/s HIL and the results will be binding on M/s HIL. It will be the responsibility of M/s HIL to satisfy the Govt. regarding any deviations as mentioned the Insecticides. Act including the specifications, additional requirements and guaranteed expiry date etc.

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In case any material is found substandard within the expiry period, M/s HIL shall be responsible to replace the failed lots at their own cost including handling and transport charges within 30 days of the receipt of the above binding test results. Failing replacement M/s HIL will be responsible to refund the cost of the material including transportation and handling charges. If the payment is not made within the above period of 30 days, M/s HIL will be liable to pay the interest at the prevailing lending bank rate, counting, from the expiry of 30 days until the refund is made. In case part of the batch found sub-standard is consumed, the supplier will be bound to refund the cost of the material consume3d also including transport and handling charges within 30 days of the complaint otherwise interest at the current lending bank rate will be charges alongwith the refund for delayed payments.

2.11 GUARANTEE/WARRANTY: The contractor/seller hereby declares that the goods/stores sold to the buyer under this contract shall be of the best quality in material and workmenship and shall be strictly in accordance with the specification and particulars contained/mentioned in the Annexure'A' thereof and the contractor /seller hereby guarantees that the said goods/stores shall continue to conform to the description and quality aforesaid for a period of twenty four months from the date of inspection of said goods/stores to the purchaser and that notwithstanding for fact that the purchaser (Inspector) may have inspected and /or approved the said goods/stores.

If during the aforesaid period of 24 months the said good/stores be discovered not to confirm to the description and quality aforesaid or have deteriorate (the decision of the purchaser in that behalf will be final and conclusive), the purchaser shall be entitled to reject the said goods/stores or such portion thereof as may be discovered not to confirm to the said description and quality. On such rejection the goods/stores shall be at the seller's risk and all the provisions here in maintained relating to the rejection of goods etc. shall apply. The contractor/seller shall if called upon to do so, replace at his own cost within a period of one month (including the transportation and handling charges) or such further period as may be extended from time to time by the purchaser at their discretion On application made thereof by the contractor/seller, the goods/stores or such portion thereof as is rejected by the purchaser and in such an event the above mentioned warranty period shall apply to the goods/stores replaced from the date of the replacement thereof otherwise the contractor/seller shall pay to the purchaser such damages as may arise by reason of the breach of the condition therein contained. Failing replacement, the supplier shall be bound to refund the cost of the material including transport and handling charges. If the payment is not made within 30 days, the supplier shall be liable to pay interest at prevailing bank lending rate counting from the expiry of above 30 days until the refund is made. In case part of the batch found substandard is consumed, the supplier shall be bound to refund the cost of the batch as a whole including transport and handling charges within 30 days of the complaint, otherwise interest at the current banks lending rate shall be charged for delayed payments. Nothing here in contained shall prejudice any other right of the purchaser in the behalf under this contract or otherwise.

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