CONSENT ORDER No. 6265 Dated: 20.02.2014


Ref: 1 Unit’s Application through Care Centre R. No. CC18208, dated: 11.11.2013.

Consent to establish or take steps to establish is hereby granted under Section 25 of the Water (Prevention and Control of Pollution) Act, 1974, as amended in 1988 (Central Act 53 of 1988) (hereinafter referred to as ‘The Act’) and the Rules and Orders made there under to

The Project Director,
M/s. Fast Reactor Fuel Cycle Facility - Department of Atomic Energy,

(therein after referred to as 'The Applicant') authorizing him/her/them to establish or take steps to establish the industry in the site mentioned below:

Kalpakkam Village,
Thirukazhukundram Taluk,
Kancheepuram District.
This Consent to establish is valid for two years, or till the industry obtains consent to operate Section 25 of the Water (Prevention and Control of Pollution) Act, 1974, as amended in 1988 whichever is earlier subject to special and general conditions enclosed.

Sd/- xxxxx
CHAIRMAN

To

The Project Director
M/s. Fast Reactor Fuel Cycle Facility
Department of Atomic Energy,
Indra Gandhi Centre for Atomic Research,
Kalpakkam – 603 102.

Copy to:

1. The District Environmental Engineer,
   Tamil Nadu Pollution Control Board,
   Maraimalai Nagar.

2. The Commissioner,
   Kancheepurm Panchayat Union,
   Kancheepuram District

3. BMS.


//Forwarded by Order//

FOR CHAIRMAN.
SPECIAL CONDITIONS

1. This consent to establish is valid for establishing the facility for the manufacture of products/byproducts (Col. 2) at the rate (Col 3) mentioned below. Any change in the product/byproduct and its quantity has to be brought to the notice of the Board and fresh consent has to be obtained.

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Reactor Fuel Subassembly</td>
<td>92 Nos/Year</td>
</tr>
<tr>
<td>2.</td>
<td>Reactor Blanket Subassembly</td>
<td>50 Nos/Year</td>
</tr>
</tbody>
</table>

2. This consent to establish is valid for establishing the facility with the below mentioned outlets for the discharge of sewage/trade effluent. Any change in the outlets has to be brought to the notice of the Board and fresh consent has to be obtained if necessary.

<table>
<thead>
<tr>
<th>Outlet No.</th>
<th>Description of Outlet</th>
<th>Maximum daily discharge in KLD</th>
<th>Point of disposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sewage</td>
<td>150</td>
<td>For gardening within unit.</td>
</tr>
<tr>
<td>2</td>
<td>Trade effluent 1 (Chiller Blowdown and DM plant regeneration)</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Trade effluent 2 (Low level liquid waste of 150 KLD diluted with 7500KLD seawater)</td>
<td>7650</td>
<td>Discharged into sea at a distance of 300m.</td>
</tr>
</tbody>
</table>

3. The unit shall provide Sewage Treatment Plant and /or Effluent Treatment Plant as indicated below:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of the treatment unit</th>
<th>Dimension in M</th>
<th>No. of units</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Sewage(150 KLD)</td>
<td></td>
<td>To provide STP of capacity 300KLD with Membrane Bio Reactor System.</td>
</tr>
<tr>
<td>2.</td>
<td>Trade Effluent 1 (15 KLD) (10 KLD Chiller Blow Down and 5 KLD DM Plant Regeneration)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3. **Trade Effluent 2( 150 KLD)**

   Chemical Treatment System, comprising of settling, clarification, sludge removal etc. followed by dilution with sea water in the ratio of 1: 50; thereby the total volume of effluent discharged shall become 7650 KLD.

4. **Additional Conditions:**

   1. The unit shall provide a Sewage Treatment Plant for treating the Sewage generated along with the chiller blow down and the D.M. Plant regeneration waste water, so as to bring the quality of treated effluent to the standards prescribed by the Board.
   2. The unit shall arrange to utilize the above treated effluent on their own land within the premises for Green Belt Development.
   3. The unit shall take measures so as to ensure that the Low Level Liquid Waste after dilution, letting in to the sea shall satisfy the standards prescribed by the Board.
   4. The unit shall comply with the conditions of the Environmental Clearance granted by MoEF, Dated: 30.04.2012
   5. The unit shall apply separately for the consent of the Board for the Housing Project.

   Sd/- xxxxxx
   CHAIRMAN

   //Forwarded by Order//

   FOR CHAIRMAN.
GENERAL CONDITIONS

1. The above consent to establish cannot be construed as consent to operate and the unit shall not commence the operation without obtaining the Consent to operate.

2. The industry shall make a request for grant of consent to operate at least thirty days before the commissioning of trial production.

3. The unit shall construct compound wall around the boundary of the unit.

4. Samples of water from the wells or any other nearby water sources have to be taken by the unit and get them analyzed by the Board Laboratory to develop base line data to assess the existing water quality.

5. The unit shall provide an alternate power source along with separate energy meter for the Effluent Treatment Plant to ensure continuous operation of the Effluent Treatment Plant.

6. The consent does not authorize or approve the construction of any physical structures or facilities, or the undertaking of any work in any natural watercourse.

7. Any change in the details furnished in the conditions has to be brought to the notice of the Board and got approved by the Board, before obtaining consent to operate under the said Act.

8. The unit has to comply with the provisions of Public Liability Insurance Act, 1991 to provide immediate relief in the event of any hazard to human beings, other living creatures/plants and properties while handling and storage of hazardous substances (if applicable).

9. Consent to operate will not be issued unless the unit complies with all the conditions of consent to establish.

10. In case there is any change in the management, the unit shall inform the change with relevant documents immediately.

Sd/- xxxxxx
CHAIRMAN

//Forwarded by Order//

FOR CHAIRMAN.

S.K. 20.02.2014
CONSENT ORDER No. Dated: 02.2014.


Ref: 1. Unit's Application through Care Centre R.No. CC18208, dated: 11.11.2013.
5. Technical sub Committee meeting held on 17.02.2014 & vide Item No: 90 -15.

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Consent to establish or take steps to establish is hereby granted under Section 21 of the Air (Prevention and Control of Pollution) Act, 1981, as amended in 1987 and the Rules and Orders made there under to

The Project Director,
M/s. Fast Reactor Fuel Cycle Facility – Department of Atomic Energy (hereinafter referred to as 'The Applicant') authorizing him/her/them to establish or take steps to establish the industry in the site mentioned below:
Kalpakkam Village,
Thirukazhukundram Taluk,
Kancheepuram District.

This Consent to establish is valid for two years, or till the industry obtains consent to operate under Section 21 of the Air (Prevention and Control of Pollution) Act, 1981, as amended in 1987 whichever is earlier subject to special and general conditions enclosed.

Sd/- xxx
CHAIRMAN
To
The Project Director,
M/s. Fast Reactor Fuel Cycle Facility
Department of Atomic Energy,
Indra Gandhi Centre for Atomic Research,
Kalpakkam – 603 102.

Copy to:

5. The District Environmental Engineer,
   Tamil Nadu Pollution Control Board,
   Maramalai Nagar.

6. The Commissioner,
   Kancheepuram Panchayat Union,
   Kancheepuram District.

7. BMS.

8. Technical File.

/Forwarded by Order/

for CHAIRMAN.
**SPECIAL CONDITIONS**

1. This consent to establish is valid for establishing the facility for the manufacture of products/byproducts (Col. 2) at the rate (Col 3) mentioned below. Any change in the product/byproduct and its quantity has to be brought to the notice of the Board and fresh consent has to be obtained.

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<tr>
<td>2.</td>
<td>Reactor Blanket Subassembly</td>
<td>50 Nos/Year</td>
</tr>
</tbody>
</table>

2. This consent to establish is valid for establishing the facility with the below mentioned emission/noise sources along with the control measures and/or stack. Any change in the emission source/control measures/change in stack height has to be brought to the notice of the Board and fresh consent has to be obtained if necessary.

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Source</th>
<th>Air pollution Control measures</th>
<th>Stack top dimension (in metres)</th>
<th>Stack height in m</th>
<th>Maximum discharge in m3/Hr</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Fuel reprocessing and waste Management plant</td>
<td>Scrubbers deep bed filters and Multi stage HEPA filters</td>
<td>6.1</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Reprocessing Uranium plant, Fuel fabrication plant and Core subassembly plant</td>
<td>Scrubbers multistage HEPA filtration</td>
<td>4.9</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Near surface storage disposal facility (NSSDF)</td>
<td>Scrubbers multistage HEPA filtration</td>
<td>1.98</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Conventional waste incineration</td>
<td>Bag filter and scrubber</td>
<td>-</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Emergency DG 3x600 KVA</td>
<td>Exhaust Pipe</td>
<td>0.75</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Boiler 2x6 T/hr</td>
<td>Common stack</td>
<td>0.625</td>
<td>38.5</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Boiler 2x2 T/hr</td>
<td>Common stack</td>
<td>0.625</td>
<td>38.5</td>
<td></td>
</tr>
</tbody>
</table>

3. **Additional Conditions:**

1. The unit shall provide Scrubbers, Deep Bed Filters, Multi Stage HEPA Filter and stack of 75 meter height for the Fuel Reprocessing and Waste Management Plant, as proposed, so as to achieve the Ambient Air Quality/Emission standards prescribed by the Board.

2. The unit shall provide Scrubbers, Multi Stage HEPA Filter and stack of 60 meter height for the Fuel Fabrication Plant, Reprocessed Uranium Plant and Core Sub-Assembly Plant, as proposed, so as to achieve the Ambient Air Quality/Emission standards prescribed by the Board.
3. The unit shall provide Scrubbers, Multi Stage HEPA Filter and stack of 60 meter height for the Fuel Fabrication Plant, Reprocessed Uranium Plant and Core Sub-Assembly Plant, as proposed, so as to achieve the Ambient Air Quality/Emission standards prescribed by the Board.

4. The unit shall provide Multi Stage HEPA Filter and stack of 75 meter height for the 'Near Surface Storage and Disposal facility', as proposed, so as to achieve the Ambient Air Quality/Emission standards prescribed by the Board.

5. The unit shall provide Bag Filter and Scrubber with a stack of 30 meter height for the Conventional (General) Waste incinerator, as proposed, so as to achieve the Ambient Air Quality/Emission standards prescribed by the Board.

6. The unit shall provide stacks of adequate height to the Boilers and Diesel Generator Sets, so as to satisfy the Ambient Air Quality/Emission standards prescribed by the Board.

7. The unit shall provide continuous online monitoring system with connectivity to CARE Air Centre for the stacks attached to the incinerator and Boilers.

8. The unit shall apply separately for the consent of the Board for the Housing Project.

9. The unit shall comply with the conditions of the Environmental Clearance granted by MoEF.

Sd/- xxx
CHAIRMAN

/Forwarded by Order/

for CHAIRMAN.

GENERAL CONDITIONS

1. The above consent to establish cannot be construed as consent to operate and the unit shall not commence the operation without obtaining the Consent to operate.

2. The applicant shall make a request for grant of consent to operate atleast thirty days, before the commissioning of trial production.
3. Any Change in the details furnished in the conditions has to be brought to the notice of the Board and got approved by the Board, before obtaining consent to operate under the said Act.

4. The unit has to comply with the provisions of Public Liability Insurance Act, 1991 to provide immediate relief in the event of any hazard to human beings, other living creatures/plants and properties while handling and storage of hazardous substances (wherever applicable).

5. Consent to operate will not be issued unless the unit complies with the conditions of consent to establish.

6. The unit shall provide adequate water sprinklers for the control of dust emission during the loading and unloading of construction material so as to minimize the dust emission.

7. The unit shall provide water sprinklers along the temporary roads inside the premises to avoid fugitive dust emission during the vehicle movements.

8. The unit shall develop green belt of adequate width around the premises.

9. In case there is any change in the management, the unit shall inform the change with relevant documents immediately.

Sd./- xxxxx
CHAIRMAN

/Forwarded by Order/

for CHAIRMAN.