ANDHRA PRADESH POLLUTION CONTROL BOARD

ZONAL OFFICE, VIJAYAWADA

Agenda for EAC (Task Force) Meeting of Zonal Office, Vijayawada
to be held on 05.09.2019 at 12.00 Noon.

Agenda Item No. - 02

Name : M/s. Royale Marine Impex Pvt. Ltd., Sy No. 37/4, 42/4 & 37/2B, Kavuruvaripalem (V), Chirala (M), Prakasam District – Non operation of Effluent Treatment Plant - Discharge of untreated effluents outside the premises – Causing water pollution in the area – Inspection by EAC committee members – Reg.

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The Board received a complaint against M/s. Royale Marine Impex Pvt. Ltd., for operating the unit in violation of conditions stipulated in the consent order by discharging untreated effluent out side the premises. On the instructions of the Board, the EE, RO, Ongole has inspected the industry on 16.07.2019 and submitted a report to the Member Secretary vide report dt. 17.07.2019. The issue was placed in the EAC committee of Zonal office, Vijayawada on 26.07.2019 duly according an opportunity to the unit holder to rectify the lapses observed during the inspection of Board officials wherein Sri. Vijaya Kumar, Director of the company has attended before the committee. The committee, then, recommended to inspect the unit by the committee members again in the 1st week of August’ 2019.

M/s. Royale Marine Impex Pvt. Ltd. is a Prawn processing unit located at Sy. No. 37/4, 42/4 & 37/2B, Kavuruvaripalem (V), Chirala (M), Prakasam District.

The industry obtained CFO & HWA order dt.03.08.2015 for Processed Shrimp – 20 TPD with validity up to 30.06.2019. Subsequently, the industry obtained renewal of CFO & HWA through Auto Renewal system on 28.06.2019 for a period up to 31.08.2025.

Process:

The shrimp process involves filth washing of raw shrimp, De-heading & Peeling of shell, removal of digestive system, washing, freezing at -18ºC and packing.

Water consumption : The source of water is bore wells within the premises and outside the industry’s area.

Water consumption as per consent order dt.03.08.2015:

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Purpose</th>
<th>Quantity (KLD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Process &amp; washings</td>
<td>120.00</td>
</tr>
<tr>
<td></td>
<td>Description of outlet</td>
<td>Max Daily Discharge (KLD)</td>
</tr>
<tr>
<td>---</td>
<td>--------------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>1</td>
<td>Trade effluents</td>
<td>112.00</td>
</tr>
<tr>
<td>2</td>
<td>Domestic</td>
<td>8.00</td>
</tr>
</tbody>
</table>

Water is used for washings and domestic purposes in the unit.

**Waste water generation mode of disposal as per consent order:**

<table>
<thead>
<tr>
<th>SI.No.</th>
<th>Description of outlet</th>
<th>Max Daily Discharge (KLD)</th>
<th>Pint of Disposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Trade effluents</td>
<td>112.00</td>
<td>On land for irrigation within the premises after treatment</td>
</tr>
<tr>
<td>2</td>
<td>Domestic</td>
<td>8.00</td>
<td>Septic tank followed by soak pit</td>
</tr>
</tbody>
</table>

During inspection it was informed that about 500 no. of workers are working in the industry. About 40 KLD domestic effluent is generated from the domestic section. But the industry has not constructed STP as directed by the Board in the consent order. The industry is collecting domestic effluent in a tank and disposing outside the premises through underground pipe line.

**Solid waste Generation & Disposal :**

The solid waste generated in the plant is Prawn head & Shell which is about 10 TPD is disposed to Chitin / Feed Manufacturing units.

**Sources of Air Pollution :**

DG set of capacity 1000 KVA, 725 KVA, 500 KVA with acoustic enclosures with required height of stacks.

**The committee observations:**


2. The industry is collecting the effluent in collection tank No.1, where diffused aeration is provided to equalize the effluent before sending for further treatment and is in the process of making ETP functional. The inlet to primary clarifier is not as per design and is pumping though pipe line along the inside periphery of the clarifier, which will not serve the purpose and hence no sludge is observed from the primary clarifier.

3. There will be 30% BOD reduction in case of operation of primary clarifier with proper inlet and required quantity of coagulation addition. However, the industry is not mixing any coagulant in the flash mixer and hence no separation of suspended
particulate matter in the primary clarifier, which contributes 30% of the BOD of effluent.

4. The industry is not maintaining MLSS (Biological Bacterial Mass) in the Aeration tank, without which there will not be reduction of BOD.

5. There was no sludge in the sludge drying beds and are observed empty & dried which is evident that the industry is not operating the ETP as per the design.

6. The water observed in the secondary clarifier is not that of inlet collection tank.

7. The industry has provided energy meter to the ETP and the value is recorded as 00049.8 kwh. The industry has informed that they have installed the energy meter 5 days ago. The ETP is having a total load of around 65 HP and as such the meter is reading is not reflecting the operation of ETP.

8. The industry has not provided digital flow meter with totaliser facility for recording the i) consumption of water ii) at the inlet of ETP and at the outlet of the ETP before final disposal.

9. The industry laid a pipe line to the Kunderu drain and is discharging the either untreated or partially treated effluent into this drain. This water joins the Pedda Kaluva along with drain water which will culminate at Bay of Bengal after travelling at a distance of around 6.0 Km., As per CFO condition the effluent is to be discharged on land for irrigation within the premises after treatment.

10. No application of treated waste water onland for irrigation / plantation is observed as the lands shown by the industry for this purpose is observed to be dry and is discharging the effluent into drain. The local villagers also confirmed the same and intimated committee members that this is a regular practice of the industry. And also pleaded the committee members to ensure the stopping of waste water into Kunderu drain as they are suffering since they could not get the yield from their Jasmine garden, Ground nut, Corn crops for the past 4 years.

11. As per consent condition no.15 of CFO & HWA order dt.03.08.2015, the industry shall construct Sewage Treatment Plant (STP) for treating the domestic waste water generated from the workers quarters. It was informed that about 1000 no. of workers are working in the industry. About 40 KLD domestic effluent is generated from the industry. But the industry has not constructed STP. The industry is collecting domestic effluent in a tank and disposing outside the premises through underground pipe line.

12. The industry has not provided Ammonia sensors in the industry.

13. Earlier, as per the instructions of the Hon’ble Chief Minister during the Collector’s conference held on 25.05.2017 & 26.05.2017, the ZO, Vijayawada issued notice to the above industry on 08.06.2017 to comply with the following directions to prevent ammonia gas leakages:

1. Ammonia sensors with alarm facility shall be installed within 15 days i.e. by 23.06.2017, at strategic locations near chilling plant so as to alert the factory
manager, supervisory staff and workers, in the event of any leakage of ammonia accidentally.

2. Onsite emergency plan shall be prepared for Ammonia gas leak and regular mock drills shall be conducted and get all the staff and workers involved. The onsite emergency plan shall be submitted to this office immediately i.e. by 12.06.2017.

3. All the required measures shall be taken for prevention of release of Ammonia Gas in to atmosphere.

14. The ZO, Vijayawada issued following directions to the above industry on 07.01.2019:

1. The industry shall comply with the discharge standards i.e. pH – 6.5-8.5, total suspended solids (TSS) – 50.00 mg/l, chemical oxygen demand (COD) – 250.00 mg/l biochemical oxygen demand (BOD) – 30.00 mg/l, oil and grease (O&G) – 10.00 mg/l by 18.01.2019.

2. The industry shall continuously operate the effluent treatment plant (ETP) and shall make necessary modifications / renovation of the existing ETPs to meet the discharge standards mentioned above.

3. The industry shall construct & commission the sewage treatment plant (STP) by 31.03.2019 for treatment of domestic sewage of 12 KLD. After treatment, the treated wastewater shall be utilized on land for irrigation duly meeting the Board’s stipulate standard of BOD – 100 mg/lt.

4. The industry shall not discharge any treated / untreated waste water outside the industry premises under any circumstances.

15. The committee observed that the industry has not complied with the above directions since the consent issued in the year 2015 showing the recalcitrant nature of the industry.

16. The industry is observed to be prudent in production operations and irresponsible in maintaining environmental standards and operating in a environmentally safe guard manner.

**Joint inspection committee recommendations to mitigate environmental pollution:**

1. The industry shall immediately stop the discharge into Kunderu Drain and remove the pipe line laid upto Kunderu Drain through which either the treated or untreated effluent is being discharged into drain in violation of CFO order conditions i.e., the effluent is to be discharged on land for irrigation within the premises after treatment.

2. The industry shall construct STP for treating the domestic effluents as per CFO order condition.
3. The industry shall provide digital water flow meters for recording consumption and waste water inlet at ETP and for treated waste water before disposal and maintain log books to quantify the use of water in the industry.

4. Industry shall maintain log book for energy meter provided to ETP.

5. The industry shall overhaul the existing ETP, maintain and operate as per design parameters.

6. The industry shall have a separate Environment Management Cell with qualified personnel to ensure the operation of ETP as per design parameters to meet the standards stipulated by the Govt. of India (BOD-30 mg/lt among other parameters) and a horticulturist to look after proper utilization of treated effluents for the plantation in their leased lands without over flowing the water into neighbors lands and into Kunderu Drain as enunciated in the CFO order.

The issue was placed before the EAC committee for review and for further recommendations.

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