



Venkata Narayana Active Ingredients Private Limited
(Formerly Nutra Specialities Private Limited)

Ref: VNAI/MoEF & CC-RO/ECCR/JUNE/2020

June 22, 2020

To

The Director

Ministry of Environment, Forest and Climate Change (MoEF &CC)
Regional Office (SEZ), 1st & 2nd Floor,
Handloom Export Promotion Council,
34, Cathedral Garden Road, Nungambakkam,
Chennai-34

Respected Sir,

Sub: M/s Venkata Narayana Active Ingredients Private Limited (Formerly M/s Nutra Specialities Private Limited) located at Sy.No:69, Chandrapadiya Village, Vinjamur Mandal, SPSR Nellore District, Andhra Pradesh submitting EC half yearly compliance report for the month of June-2020- Regarding.

Ref: EC order F.No. J-11011/1313/2007-IA(II)(I) Dated 2nd February 2009

This has reference cited above on the aforementioned subjected, we are herewith enclosing Half yearly (**June-2020**) condition wise compliance report of **Environmental Clearance** for Part-A Specific conditions and Part-B General conditions of our Active Pharmaceutical Ingredients (APIs) manufacturing unit located at Sy.No:69, Chandrapadiya Village, Vinjamur Mandal, SPSR Nellore District, Andhra Pradesh for your kind perusal and consideration.

Kindly acknowledge the receipt of the same.

Thanking you,
For **M/s Venkata Narayana Active Ingredients Private Limited**,

Yours Faithfully,


(Authorized Signatory)

Encl: EC condition wise compliance report with Annexure-I to Annexure-VI.

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VENKATA NARAYANA ACTIVE INGREDIENTS PRIVATE LIMITED
(Formerly Nutra Specialties Private Limited)

Sy.No:69, Chandrapadiya (V), Vinjamur(M), SPSR Nellore District, Andhra Pradesh.

CONDITION-WISE COMPLIANCE REPORT OF ENVIRONMENTAL CLEARANCE

Ministry of Environment, Forest & Climate Change, Govt of India

EC Order No:F.No.J-11011/1313/2007-IA II (I) Dated February 2, 2009

Date of submission: 22.06.2020

S.No	Conditions of Environmental Clearance	Status of Compliance
A.SPECIAL CONDITIONS		
I	The company shall implement Good Laboratory Practices (GLP)	<p style="text-align: center;">Complied</p> <p>We have established good laboratory facilities for analysing the quality of the products and also monitoring the Chemical Oxygen Demand, Dissolved oxygen, Biological Oxygen Demand, TDS and pH from effluent water.</p> <p>The laboratory is equipped with the following</p> <ol style="list-style-type: none"> High performance liquid chromatography (HPLC) Gas Chromatography (GC) Infrared spectroscopy Ultraviolet spectroscopy Total organic compound analyser Particle size analyser pH Meter Conductivity meter Polari meter <p>However, the Environmental parameters such as Ambient Air Quality, Ambient Noise levels and Stack emissions are monitored through MoEF&CC authorised third party laboratory.</p> <p>Laboratory facility photo is attached as Annexure-I</p>
ii	The gaseous emissions (HBr, SO _x , NO _x & HCl) particulate matter from various process units shall conform to the standards prescribed by the concerned authorities from time to time. At no time, the emission levels shall go beyond the stipulated standards. In the event of failure of pollution	<p style="text-align: center;">Complied</p> <p>There are three sources of gaseous emissions (Two boiler (2x4 TPH), Two</p>

	<p>control system(s) adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency</p>	<p>DG sets (1x500 KVA & 1X 725 KVA, and other process emissions). Bio briquettes is used as the fuel for boiler.</p> <p>For boiler, cyclone separator followed by bag filter is provided to control SPM emissions. Adequate stack height with acoustic enclosures is provided for DG sets. Two stage scrubbers (2 Nos) are provided for process emissions.</p> <p>Monitoring of gaseous emissions and particulate matter from various process units was carried out on quarterly basis through MoEF&CC recognized third party laboratory. The monitored data shows that the values are within standards.</p> <p>In addition to this, we have installed 2 nos of Online Ambient Air quality monitoring stations in down wind and upwind directions for monitoring PM10, PM2.5, SO2, NOx. The online real time monitoring data is being transmitted to APPCB/CPCB servers.</p> <p>Boilers, cyclone separators & DG sets photo is enclosed as Annexure-II</p>
iii	<p>Ambient air quality monitoring stations shall be set up in the downwind direction as well as where maximum ground level concentration are anticipated in consultation with the SPCB.</p>	<p>Complied</p> <p>There are three AAQ monitoring stations has been set up in the downwind direction as well as where maximum ground level concentrations are anticipated in consultation with SPCB and is being monitored on quarterly basis through MoEF & CC approved laboratory for the parameters of PM10, PM2.5, SO2, NOx. The monitored data shows that the values are within the NAAQ standards.</p> <p>In addition to this, we have installed 2 nos of Online Ambient Air quality</p>

		<p>monitoring stations in downwind and upwind directions for monitoring PM10, PM2.5, SO2, NOx. The online real time monitoring data is being transmitted to APPCB/CPCB servers.</p> <p>Online AAQ photos are enclosed as Annexure-III</p>
iv	Process emissions is in the form of HCl, SO2 and HBr shall be scrubbed in the scrubber. The scrubber efficiency shall be 99%	<p>Complied</p> <p>Process emissions (HCl, SO2 and HBr) are being scrubbed in the two-stage scrubber. The scrubber efficiency is about 98% as informed.</p>
V	For control of particulate emissions, boilers shall provided with cyclones separators and stack height as per Central Pollution Control Board guidelines.	<p>Complied</p> <p>We have installed two boilers at the capacity of 2x4 TPH. Cyclone separators are provided for boilers. The boilers are equipped with bag filter with stack height of 30 m height as stipulated by PCB. Scrubbers are also provided in manufacturing blocks. Reactors are equipped with primary and second condensers with chilled brine circulation to control fugitive losses of solvents. Solvents to reactors are transferred through closed pipeline. Reactors are provided with scrubbers as per requirement as informed.</p>
vi	Spent solvents shall be recovered as far as possible & recovery shall not be less than 95 percent. During purification process, solvent vapours are emitted from purification tanks as fugitive emissions. Action shall be taken to reduce the emissions as far as possible. All venting equipment shall have vapour recovery system	<p>Complied</p> <p>We have installed Solvent Recovery Plant (SRP) with four columns.</p> <p>There are four types of major solvents are used (Acetone, Ethyl acetate, Isopropyl alcohol and dichloromethane) and the recovery is about 98%.</p> <p>To avoid fugitive emissions during purification process, the industry has taken the following measures;</p> <p>a) Replaced plate and frame heat exchangers with shell & tube condensers to improve the solvent recovery.</p>

		<p>b) All distillation units are provided with secondary condensers to trap the uncondensed solvent thereby maximise solvent recovery and minimise fugitive emissions.</p> <p>c) All bulk storage tanks are provided with vent condensing system along with breather valve provision to minimise solvent losses/emissions.</p> <p>SRP photo is enclosed as Annexure-IV</p>
vii	<p>The company shall undertake the following waste minimization measures.</p> <p>A.Metering and control of quantities of active ingredients to minimize waste.</p> <p>B.Re-use of byproducts from the as raw materials or as raw material substitutes in other processess</p> <p>C.Use of automated filling to minimize spillages</p> <p>D.Use of closed feed system into batch reactors</p> <p>E.Venting equipment through vapour recovery system</p> <p>F.Use of high pressure hoses for equipment clearing to reduce waste water generation</p>	<p>Complied</p> <p>The industry has adopted following waste minimization measures</p> <p>A. All the raw materials taken by metering and weighing.</p> <p>B. At present no by-products have been produced.</p> <p>C. Use of automated filling to minimize spillage.</p> <p>D. Closed feed system for charging of raw materials into reactors</p> <p>E. Provided double condensers to reactors with RT/Chilled water and brine circulation for vapour recovery system</p> <p>F. Using pressure hoses for cleaning of equipment to reduce wastewater generation.</p>
viii	<p>Fugitive emissions in the workzone environment, product, raw material storage area shall be regularly monitored. The emissions shall conform to the limits imposed by SPCB.</p>	<p>Complied</p> <p>Monitoring of Fugitive emissions in the work zone environment, product, and raw materials storage area was carried out on quarterly basis through MoEF &CC recognized third party laboratory. The monitored data shows that the values are well within the limits.</p>
ix	<p>The project authorities shall provide the chilled brine sollution in secondary condenser for condensation of the VOCs and</p>	<p>Complied</p>

	<p>ensure that the solvent recovery shall not be less than 95 percent.</p>	<p>We have provided the chilled brine solution in secondary condenser for condensation of the VOCs.</p> <p>We have installed Solvent Recovery Plant (SRP) with four columns. There are four types of major solvents are used (Acetone, Ethyl acetate, Isopropyl alcohol and dichloromethane) and the recovery is about 98%.</p>
X	<p>The company shall provide the monitoring equipment with vents and regular monitoring shall be carried out and reports submitted to the SPCB, CPCB and Ministry's Regional Office at Bangalore</p>	<p>Complied</p> <p>There are 12 reactors and 12 vents, one attached to each reactor. All reactor /vents are connected online for instant emission details.</p> <p>Regular monitoring is carried out by the MoEF authorised laboratories and submitting reports to the Regional office regularly.</p>
xi	<p>To prevent the solvent loss, following measures shall be taken.</p> <p>A. Reactor shall be connected to chilled brine condenser system</p> <p>B. Reactor and solvent handling pump shall have mechanical seals to prevent leakages.</p> <p>C. The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.</p> <p>D. Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.</p> <p>E. Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.</p>	<p>Complied</p> <p>A. Chilled brine condenser system provided for all the reactors to minimise vapor losses.</p> <p>B. Mechanical seals provided to reactor and solvent handling pump to prevent the leakages.</p> <p>C. Primary and secondary condensers are provided with sufficient HTA and residence time so as to achieve more recovery.</p> <p>D. Proper earthing has been provided to all equipments and regular inspections are done to maintain continuity</p> <p>E. Flame proof mechanism has been provided and breather valves installed to solvent storage tanks to prevent lossess.</p>

xii	<p>The process emissions VOCs and particulate matter from various units shall conform to the standards prescribed by the concerned authorities from time to time. At no time, the emission levels shall go beyond the stipulated standards. In the event of failure of pollution control system(s) adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieved.</p>	<p style="text-align: center;">Complied</p> <ol style="list-style-type: none"> 1) We have installed online VOC analyser with data logger and portable VOC analyser. As informed, we are submitting the data on monthly to SPCB. 2) The gaseous emissions and particulate matter from various process units is being carried out on quarterly basis through MoEF & CC recognized third party laboratory for the parameters of PM10, PM2.5, SO2, NOx. The monitored data shows that the values are within the standards prescribed by the concerned authorities. To control gaseous emissions following have been adopted <ul style="list-style-type: none"> • Installation of two stage scrubbers (2 nos) for the vents of the reactors in which acidic reactions are being carried. • Installation of dual stage condensers for all the reactors to avoid process emissions. • Equalization tanks of ETP are being covered with FRP hoods and the vents of the hoods are connected to scrubbers. • All DG Sets are provided with sufficient stack height as per norms. 3) As informed, at no time, the emission levels has gone beyond the stipulated standards and the factory operations are being stopped in the event of failure of pollution control systems
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		adopted and being re-started only after rectification.
xiii	<p>Effluent generation shall not exceed 67.03 m³/d. The effluent shall be segregated into high COD and low COD streams. The high COD effluent shall be forced evaporated. The effluent with high COD shall be stripped for solvent before sending into the forced evaporator. The condensate from the evaporator and effluent from the utility blow downs shall be treated in ETP and treated effluent conforming to the prescribed standards shall be used for green development. The concentrate from MEE shall be filter press. The salt obtained from MEE shall be disposed in to secured land fill (TSDf) after packaging in HDPE bags. The domestic effluent (6m³/d) shall be sent to septic tank followed by soakpit.</p>	<p>Complied</p> <p>We have installed 100 KLD Effluent Treatment Plant (ETP).</p> <p>The effluent generation is about 45-55 KLD which is being sent to ETP for treatment.</p> <p>All effluents are being segregated into HTDS and LTDS. All HTDS effluents are treated through stripper followed by Multi Effect Evaporator (MEE) and agitated Thin Film Dryer (ATFD). The condensate generated from MEE and ATFD are mixed with LTDS effluent and further treated in biological ETP and RO Plant.</p> <p>Salts are being disposed to TSDf for secured land filling.</p> <p>LTDS and all blowdowns are subjected to ETP and water is being used for cooling towers/boiler makeup and garden development after confirming the limits as prescribed by APPCB.</p> <p>The ETP sludge generated from ETP operations are being sent to TSDf for secured landfill.</p> <p>We have installed online flow meters for HTDS and LTDS and connected to the SPCB/CPCB.</p> <p>ETP, MEE & Flow meters are enclosed as Annexure-V.</p>
xiv	<p>The company shall develop in water harvesting structures to harvest the run off water for recharge of ground water.</p>	<p>Complied</p> <p>We have developed water harvesting structure with the capacity of 500 KL to harvest the run-off water for recharge of ground water.</p>

xv	Green belt shall be provided in an area 33% to mitigate the effects of fugitive emission all around the plant . Development of belt shall be as per the central pollution Control Board guidelines.	<p>Complied</p> <p>Green belt has been developed in an area of more than 33% (13 acers) of the total project area (33% acers) by plating Pongamia, neem, coconut trees, conocarpus etc in consultation with the local DFO and survival of the green belt is good.</p> <p>Greenbelt development photographs are enclosed as Annexure-VI</p>
xvi	Permission shall be obtained to draw ground water from the state Ground Water Board/ Central Ground water board as may be applicable to this case.	<p>Complied</p> <p>We have obtained permission from State Ground Water & Water Audit dept, Government of Andhra Pradesh vide letter No.1168/Hg-II/2017 dated 12.02.2019.</p>
xvii	Occupational health surveillance of the workers be done on a regular basis and records maintained as per the factories Act.	<p>Complied</p> <ol style="list-style-type: none"> 1) Occupational health centre has been set up in the premises of the factory. 2) We have engaged part-time doctor and paramedical staff. 3) The occupational health surveillance of the workers is being carried-out on regular basis and the records are being maintained as per Factories Act.

B.GENERAL CONDITIONS

i.	The project authorities Shall strictly adhere to the stipulations made by the Andra pradesh state pollution Control Board.	<p>Complied</p> <p>We are strictly adhering to the stipulations made by the State Pollution Control Board and ensure that we will not violate the norms prescribed by the board.</p>
ii.	At no time, the emissions shall exceed the prescribed limits. In the event of failure of any pollution Control system adopted by the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieved.	<p>Agreed to comply</p> <p>At no time, the emission levels have exceeded the prescribed limits and assured that in the event of failure of any pollution control system adopted by the unit, the unit will be put out of</p>

		operation immediately and will not be restarted until the desired efficiency has been achieved.
iii.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any	<p>Complied</p> <p>No expansion or modifications were carried out without the approval of the Ministry.</p> <p>Now we are going for expansion from 142.32 TPA to 500 TPA and the application is submitted to Ministry.</p>
iv.	The project authorities shall strictly comply with the rules and regulations under Manufacture , Storage and import of Hazardous Chemicals Rules , 1989 as amended in October, 1994 and January , 2000 . Authorization from the the SPCB shall be obtained for collection, treatmentt , storage , disposal of hazardous wastes.	<p>Complied</p> <p>a) We have obtained Authorization from APPCB to handle Hazardous Waste as per notification and we are implementing the stipulation.</p> <p>b) It is informed that all the solid wastes generated in the form of process waste including organic residue and spent carbon is collected, stored and being sent to TSDF for secured land fill also given to the authorized cement industries. Sludge from ETP and evaporation salts are being sent to TSDF for landfill. Used oil and mixed solvents is being sent to authorized recyclers/cement plants. Containers and container liners of hazardous chemicals are being sent to Recyclers after complete detoxification.</p> <p>c) The Hazardous waste Authorization is valid up to 31.03.2021.</p>
v.	The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Wastes (Management ,handling and Transboundary Movement) Rules ,2008 , Authorization from the state pollution Control Boards must be obtained for collection/ treatment/ storage/ disposal of hazardous wastes.	<p>Complied</p> <p>a) It was submitted that the condition is noted and assured to abide by the condition.</p>

		<p>b) It is informed that the solid waste and hazardous waste are being sent to the SPSCB authorised parties only.</p> <p>c) Regularly obtaining renewal of consent and authorization from SPCB and is valid up-to 31.03.2021.</p>
vi	<p>The overall noise levels in and around the plant area shall be kept well within the standards (85dBA) by providing noise control measure including acoustic hoods, Silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment Protection Act, 1986 rules, 1989 viz 75 dBA (day time) and 75 dBA (night time)</p>	<p>Complied</p> <p>a) The ambient noise levels in and around the plant area is being monitored at 6 locations (Near Boiler, Near Security Gate Near Chilling Plant, Near Production, Near DG set and Near ETP) both day and night through authorized third party and the values are well within the limits.</p> <p>b) Data on ambient noise levels is being regularly submitted to the RO, MoEF & CC, Chennai. The monitored data shows that the values are well within the limits.</p> <p>c) Noise controlling measures such as silencers and acoustic hoods are provided for DG sets.</p>
vii	<p>The project proponent shall also comply with all the environmental protection measures and safe guards recommended in the Environment Impact Assessment Notification, 1994 report</p>	<p>Reportedly complied</p> <p>Reportedly complied environmental protection measures and safeguards as recommended in EIA report.</p>
viii	<p>A separate Environmental Management Cell equipped with full pledged laboratory facilities shall be setup to carry out Environmental Management and Monitoring functions</p>	<p>Complied</p> <p>A separate Environmental Management Cell has been set up with qualified officers. Laboratory is provided with full-fledged facilities and equipment for monitoring</p>

		Chemical Oxygen Demand (COD), Dissolved Oxygen (DO), Biological Oxygen Demand (BOD), Conductivity, TDS and pH. Effluent quality is also monitoring in addition to third party. AAQ and stack emission are monitored through external agency in addition to online monitoring facilities. Noise levels are also monitored through external approved lab.
ix	The project authorities shall earmark separate funds to implement the conditions stipulated by the MoEF as well as State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.	<p>Complied</p> <p>It is to inform that an amount of Rs.384.0 lakhs and Rs.79.5 lakhs towards capital cost and recurring cost/annum for environment pollution control measures were allotted and spent. The fund provided / allotted was not diverted for any other purpose as informed.</p>
X	The implementation of the project vis-a-vis environmental action plans shall be monitored by Ministry's regional office at Bangalore/SPCB/Central Pollution Control Board. A six monthly compliance status report shall be submitted to monitoring agencies.	<p>Complied</p> <p>We are submitting six monthly compliance reports on the status of conditions stipulated in Environmental Clearance along with the monitoring data to the Ministry's regional office, Chennai. The last report was submitted on 25.12.2019.</p>
xi	The project proponent shall inform the public that the project has been accorded environmental clearance by the ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at website of the ministry at http://envifor.nic.in . This shall be advertised with seven days from the date of issue of the clearance letter, at least in two local news papers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and copy of the same shall be forwarded to the Ministry's Regional Office at Bangalore.	<p>Complied</p> <p>We had given advertisement both in English (Deccan Chronical) on 23.08.2009 and Telugu (Sakshi) on 22.08.2009 in local news paper and provided copy of the same to RO, MoEF& CC, Chennai.</p>
xii	The project authorities shall inform the Regional office as well as Ministry, the date of financial closure and final approval of the project by the concerned authorities and date of start of the project.	<p>Complied</p> <p>We have intimated the date of financial closure, final approval of the project and the date of start of the project to RO, MoEF &CC, Chennai.</p>

ANNEXURE- I (GOOD LABORATORY PRACTICES)



ANNEXURE- II (BOILER, CYCLONE SAPERATOR & DG)



ANNEXURE- III (AMBIENT AIR QUALITY MONITORING STATIONS)



ANNEXURE- IV (SOLVENT RECOVERY PLANT)



ANNEXURE- V (ETP, MEE & HTDS, LTDS FLOW METERS)



ANNEXURE- VI (GREENBELT DEVELOPMENT)

