

To,
The Director (S),
Ministry of Environment & Forest
Northern Regional Office
Bays No. 24-25, Sector 31-A
Dakshin Marg, Chandigarh-160030

Date : 15.01.2023

Subject: Point-wise **December 2022** compliance report for the Environmental Clearance condition for the Expansion of the existing Pesticide Formulation Plant (90 MTPD) by installing Pesticide Manufacturing Unit (21 MTPD) at Village Nathupur, District Sonipat, Haryana by M/s Crystal Crop Protection Ltd. Limited.

Dear Sir,

We wish to inform your good self that we have obtained Environmental Clearance Conditions / Safeguards obtained vide Letter No. J-11011/120/2011-IA II(I) dated 23.05.2012 for the Expansion of the existing Pesticide Formulation Plant (90 MTPD) by installing Pesticide Manufacturing Unit (21 MTPD) at Village Nathupur, District Sonipat, Haryana in the name of Crystal Phosphates Limited transfer vide MoEF&CC letter No. J-11011/120/2011-IA II(I) dated 13th April 2018 (copy enclosed) in the name of M/s Crystal Crop Protection Limited.

Expansion work of our Existing unit had already been completed and unit is under production since 2014. We have obtained Consent to Operate for the Project from Haryana Pollution Control Board vide letter No. HSPCB/Consent/ :**313100922SONCTO25868033** valid up to 30.09.2024. In this regard, as per the conditions laid down in the Environmental Clearance Letter, we are hereby submitting the following:

1. Point-wise December 2022 Compliance Report-Annexure-I
2. Site Photographs – Annexure – II
3. Copy of Environmental Clearance-Annexure-III
4. Copy of NOC-Annexure-IV
5. Copy of CTO from HSPCB-Annexure-V
6. Copy of Forest Permission-Annexure-VI
7. Copy of Fire NOC-Annexure-VII
8. Copy of CGWA Permission -Annexure-VIII
9. Copy of waste disposal agreement with GEPIL– Annexure – IX
10. Copies of recent Reports of the test conducted by MoEF&CC approved lab – Annexure X
11. Copy of latest Environmental Statement submitted on Form V

We hope that this will fulfill all the requirements.

Thanking You,

Yours Faithfully,
For Crystal Crop Protection Limited.

(Authorized Signatory)

CC: Regional Officer (HSPCB)
Sonipat (Haryana)

Crystal Crop Protection Limited

(Formerly known as Crystal Crop Protection Pvt. Ltd.)

Works Address: V.P.O. Nathupur, Sonapat-131029, Haryana | Tel: +91-130-2219286, 91-130-2219289,

Corporate Address: B-95, Wazirpur Industrial Area, Wazirpur, Delhi - 110052, India | Tel: +91-11-49007100, +91-11-27006800 | Fax: +91-11-49007200, 1

Registered Address: 206, Second Floor, Span Trade Centre, Opp. Kochrab Gandhi Ashram, Near Paldi Char Raasta Ashram Road, Ellisbridge, Ahmedabad - 380006, Gujarat | Tel & Fax: +91-79-26578923

CIN : U01403GJ1994PLC097033 | info@crystalcrop.com | www.crystalcropprotection.com

Annexure-1
December 2022 Compliance Report

POINT WISE DECEMBER 2022
COMPLIANCE REPORT

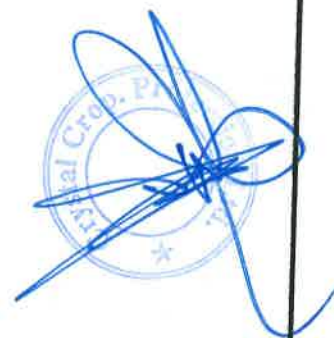
EXPANSION OF PESTICIDE
MANUFACTURING UNIT
AT
VILLAGE NATHUPUR - 131029,
DIST. SONEPAT,
HARYANA

Being developed by
M/s Crystal Crop Protection Ltd.
GI / 17, Industrial Area, G. T. Karnal Road,



1. INTRODUCTION:-

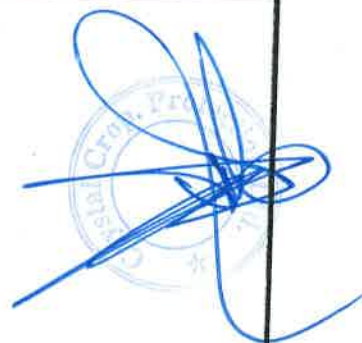
Name of the project	Expansion of the existing Pesticide Formulation Plant (90 MTPD) by installing Pesticide Manufacturing Unit (21 MTPD)
Developed by	M/s Crystal Crop Protection Ltd.
Site address	Village Nathupur, District Sonipat, Haryana
Environment Clearance Letter No :	J-11011/120/2011-IA II(I) dated 23.05.2012 transferred in the name of Crystal Crop Protection Limited vide Letter No. J-11011/120/2011-IA II(I) dated 13.04.2018
Project Description	Project involves the expansion of the existing Pesticide Formulation Plant (90 MTPD) by installing Pesticide Manufacturing Unit (21 MTPD)
Construction Status	Construction has already been completed, now the plant is running. Consent to Operate has already been taken from Haryana Pollution Control Board vide their letter No. HSPCB/Consent/: 313100922SONCTO25868033 valid up to 30.09.2024.
Year of Commencement	2013
Year of Completion	2014

A circular blue ink stamp is visible, partially obscured by a large, stylized handwritten signature in blue ink. The stamp contains the text "Crystal Crop Protection Ltd." and a star symbol.

2. Project Details:

The said project is Expansion of the existing Pesticide Formulation Plant (90 MTPD) by installing Pesticide Manufacturing Unit (21 MTPD) at Village Nathupur, District Sonapat, Haryana. The total estimated cost of the project is Rs. 15 Crores. The project has the following salient features: -

Description	Existing Factory	After Expansion
Total Plot Area	5842.4 m ²	18005 m ²
Green Area	2542.9 m ²	5941 m ²
Total Build up area	3229.5 m ²	8564 m ²
Production	Formulation 90 tons/day	Addition of Technical Grade-21 tons/day
Solid waste Generation	2.5 KG	10 kg /day
Process Waste	NIL	20 kg/day
Hazardous waste	NIL	19 kg/day
Water Requirement	4 KLD	12 KLD
Waste Water To ETP	2 KLD	12 KLD
STP	15 KLD	2 KLD
ETP	NIL	12 KLD
Electric Load	200 KVA	625 KVA
APCS	NIL	Yes
Incinerator	NIL	Installed
Multi Effect Evaporator	NIL	Installed



A. Compliance to Specific Conditions

Point No.1	National Emission Standards for Pesticide Manufacturing and Formulation Industry issued by the Ministry vide G.S.R. 46(E) dated 3 rd February, 2006 and amended time to time shall be followed.
Action Taken	We are following the National Emission Standards for Pesticide Manufacturing and Formulation Industry issued by the Ministry vide G.S.R. 46(E) dated 3 rd February, 2006 and amended time to time. Also we have installed online stack monitors on all the three stacks (Boiler, Incinerator & process stack), and the data is continuously on air which is being monitored by CPCB & HSPCB.

Point No.2	Permission shall be obtained from the State Forest Department regarding the impact of the proposed project on the surrounding reserve forest.
Action Taken	Necessary permission from Forest department has been obtained and enclosed as Annexure-VI.

Point No.3	Stack of adequate height shall be provided to oil fired thermic fluid heater and steam boiler. Online oxygen analyzer shall be installed to ensure air/fuel ratio and combustion efficiency.
Action Taken	No thermic fluid heater has been installed by the company. Separate 30 Meter high stacks have been separately provided for boiler & Incinerator. Online stack monitors have already been installed to all stacks, and the data is continuously on air which is being monitored by CPCB & HSPCB. (see enclosed photographs)

Point No.4	As proposed, process fumes shall be scrubbed by two stage/three stage alkali scrubber. The scrubbing media shall be sent to effluent treatment plant (ETP) for treatment. Efficiency of air pollution control device shall be monitored regularly and maintained properly. At no time, the emission levels shall go beyond the prescribed standards. The system shall be interlocked with the pollution control equipments so that in case of any increase in pollutants beyond permissible limits, plant shall be automatically stopped. Stack monitoring shall be done regularly and report shall be submitted to Haryana state Pollution Control Board (HSPCB) and Ministry's regional office at Chandigarh.
Action Taken	Three stage scrubbers consisting of graphite tube scrubber, venturi scrubber and packed bed post scrubber has already been provided. The scrubbing media is being sent to effluent treatment plant (ETP) for treatment. Online stack monitoring systems have already installed on each stack and Stack monitoring is also being regularly monitored by HSPCB & MOEF approved laboratory to ensure that emission is under permissible limit. (see enclosed photographs)

Point No.5	In order to control odour, outlet of process vents shall be connected to the incinerator
Action Taken	Odour control technologies are being adopted, vents are connected to scrubber.

Point No.6	The National Ambient Air Quality Emission Standards issued by the Ministry vide G. S.R. No. 826(E) Dated 16 th November, 2009 shall be followed by the unit.
Action Taken	National Ambient Air Quality Emission Standards issued by the Ministry vide G. S.R. No. 826(E) Dated 16 th November, 2009 are being followed. Ambient air quality is monitoring is being done by third party who are approved by HSPCB.

Point No.7	In plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Fugitive emissions shall be controlled by providing closed storage, closed handling & conveyance of chemicals/materials, multi cyclone separator and water sprinkling system shall be provided at loading and unloading areas to control dust emissions. Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall be regularly monitored and records maintained. The emissions shall conform to the limits stipulated by the HSPCB.
Action Taken	Necessary check on fugitive emission from all the vulnerable sources has been made. During expansion of plant necessary care has been taken to avoid dust emission. Necessary water sprinkling has been done. All the vents from emission sources have been channelized to Dust Collectors & Cyclone arrangements. The emissions shall conform to the limits stipulated by the HSPCB.

Point No.8	For further control of fugitive emissions, following steps shall be followed: <ol style="list-style-type: none"> 1. Closed handling system shall be provided for chemicals. 2. Reflux condenser shall be provided over reactor. 3. System of leak detection and repair of pump/pipeline based on preventive maintenance. 4. The acids shall be taken from storage tanks to reactors through closed pipeline. Storage tanks shall be vented through trap receiver and condenser operated on chilled water. 5. Cathodic protection shall be provided to the underground solvent storage tanks.
Action Taken	All the suggested measures have been adopted in order to control the further fugitive emission during the operation of the plant. (See enclosed photographs)

Point No.9	A proper Leak Detection And Repair (LDAR) Program for pesticide industry shall be prepared and implemented as per CPCB Guidelines. Focus shall be given for prevention of fugitive emissions for which preventive maintenance of pumps, valves, pipelines are required. Proper maintenance of mechanical seals of pumps and valves shall be given. A preventive maintenance schedule for each unit shall be prepared and adhered to.
Action Taken	Proper Leak Detection And Repair (LDAR) Program has been prepared and same is being implemented as per CPCB Guidelines. Proper maintenance of mechanical seals of pumps and valves is being done. Preventive maintenance schedule for each unit has been prepared.

Point No.10	Continuous monitoring system for VOCs shall be installed at all important places/areas. Effective measures shall be taken immediately, when monitoring results indicate above the permissible limits.
Action Taken	Continuous monitoring system for VOCs have already been installed. Immediate action is taken when alarms are received. (see enclosed photographs)

6

Point No.11	The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution.
Action Taken	The height of stack of DG Set has already been set as per CPCB standards. To mitigate the noise pollution, the DG set has been provided acoustic enclosure.(see photographs)

Point No.12	The company shall upload the status of compliance of the stipulated environmental clearance conditions, including results of monitored data on its website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal office of CPCB and the HSPCB. The levels of PM ₁₀ , SO ₂ , NOX, VOC, HCL and HC (Methane and Non-methane) in ambient air and emissions from the stacks shall be monitored and displayed at a convenient location near the main gate of the company and at important public places.
Action Taken	Status of compliance of the stipulated environmental clearance conditions has been uploaded on website link Crystal Crop-Corporategovernance (crystalcrop.protection.com) . Company has also already installed "Continuous Online Effluent and stacks Monitoring Devices" and the data is also being aired which is also visible to CPCB & HSPCB at URL:http://nevcodata.com and URL:http://glens.glenserver.com .

Point No.13	Chilled brine circulation system shall be provided to condensate solvent vapors and reduce solvent losses. It shall be ensured that solvent recovery should not be less than 95%.
Action Taken	Chilled brine circulation system (having temp. up to -25 °C has been provided to condensate solvent vapors and reduce solvent losses. Solvent recovery up to 95% has been made.

Point No.14	Solvent management shall be carried out as follows: <ul style="list-style-type: none"> i. Reactor shall be connected to chilled brine condenser system. ii. Reactor and solvent handling pump shall have mechanical seals to prevent leakages. iii. The condensers shall be stored in separate space specified with all safety measures. iv. Proper Earthing shall be provided in all the electrical equipment wherever solvent handling is done. v. Entire plant shall be flame proof. The solvent storage tanks should be provided with breather valve to prevent losses.
Action Taken	All suggested measures for solvent management have been adopted. All reactors have been connected to chilled brine condensers, all condensers have been placed on separate floor, each equipment has been provided proper earthlings. All electrical devices which we have used in entire plant are flameproof. (see photographs)

Point No.15	Total Water requirement from ground water source shall not exceed 23m ³ /day and prior permission shall be obtained from CGWA/SGWA.
-------------	--

Action Taken	Total Water requirement from ground water source shall not be exceeding the limit and prior permission has been obtained from CGWA. Copy of CGWA Permission is enclosed as Annexure- VIII
--------------	---

Point No.16	Industrial wastewater generation shall not exceed 8.3 m ³ /day. Total process effluent (8.3m ³ /day) shall be segregated into high COD/organic waste, high COD/TDS and low COD/TDS effluent streams. High COD/organic waste/toxic aqueous effluent shall be incinerated. High COD/TDS effluent stream shall be passed through stripper and evaporated through MEE. Low COD/TDS effluent stream shall be treated in effluent treatment plant (ETP) Followed by RO and treated water shall be used in boiler, washing etc. to achieve zero discharge. Domestic waste water should be treated In STP. Water quality of treated effluent shall be monitored regularly.
Action Taken	Process effluent quantity doesn't exceeds the limit. Effluent after equalization/neutralization is being flocculated and clarified then it is fed to "Multi Effect Evaporator" condensed water is passed through RO plant. BOD, COD, TSS, pH of treated water is being continuously measured by "Continuous Online Effluent Monitoring Device" and the data is also being aired, which is also is visible to CPCB http://glens.glenserver.com & HSPCB at https://hspcb.glensserver.com

Point No.17	No effluent shall be discharged outside the premises and Zero discharge concept shall be adopted.
Action Taken	We have adopted zero discharge concept in our unit. (please see enclosed chart)

Point No.18	Incinerator comprising primary and secondary chamber shall be designed as per CPCB guidelines. SO ₂ , NO _x , HCL and CO emissions shall be monitored in the stack regularly.
Action Taken	Incinerator is designed as per CPCB guidelines

Point No.19	Hazardous chemicals shall be stored in tanks in tank farms, drums, carboys etc. Flame arresters shall be provided on tank farms. Solvent Transfer shall be by pumps.
Action Taken	Hazardous chemicals are stored properly and flame arresters have been provided on tank farms.

Point No.20	The company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans Boundary Movement) Rules, 2008 and amended as on date for management of Hazardous waste and prior permission from HSPCB shall be obtained for disposal of solid/hazardous waste in the TSDF. Measures shall be taken for firefighting facilities in case of emergency. Membership of TSDF for hazardous waste disposal shall be obtained.
Action Taken	Authorization under the Hazardous Waste (Management, Handling and Trans Boundary Movement) Rules, 2016 and amended as on date has already obtained. Authorization No. is HWM/SON/2022/5745536 which is valid till 30/09/2024. copy is enclosed in Annexure-V. All measures and precaution are being taken for firefighting facilities in case of emergency. Membership of TSDF has already been taken for waste disposal.

Point No.21	As proposed, ETP sludge and evaporation residue shall be sent to TSDF site. High calorific value waste such as spent organic shall be sent to cement factory/incinerated.
Action Taken	We have made an agreement with GEPIL copy is enclosed as Annexure-IX. all ETP sludge and process residue are being sent to TSDF as and when required.

Point No.22	The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 11989 as amended in October, 1994 and January, 2000. All Transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
Action Taken	We will comply with the requirement.

Point No.23	<p>The company shall undertake following waste minimization measures:-</p> <ol style="list-style-type: none"> Metering and control of quantities of active ingredients to minimize waste. Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. Use of automated filling to minimize spillage. Use of Close Feed system into batch reactors. Venting equipment through vapour recovery system. <p>Use of high pressure hoses for equipment clearing to reduce waste water generation.</p>
Action Taken	Suggested waste minimization techniques have been adopted in proposed expansion of the unit.

Point No.24	The unit shall make the arrangements for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.
Action Taken	Arrangements for protection of possible fire hazards during manufacturing process in material handling have been made. Hydrant monitoring system has been provided as a fire fighting system as per the norms.

Point No.25	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
Action Taken	We are complying with the condition during construction phase and it shall be complied during operation phase.

Point No.26	Green belt shall be developed at least in 33% of the plant area in and around plant premises to mitigate the effects of fugitive emissions all around the plant as per the CPCB guidelines in consultation with DFO. Thick greenbelt with suitable plant species shall be developed around the proposed pesticide unit to mitigate the odour problem. Selection of plant species shall be as per the CPCB guidelines.
Action Taken	Adequate green area has been developed in and around the Plant. Selection of plant species are as per the CPCB guidelines.

Point No.27	All the commitments made during the Public hearing/ Public Consultation meeting held on 21 st December, 2010 shall be satisfactorily implemented and adequate budget provision should be made accordingly.
Action Taken	Noted. We will comply.



Point No.28	The company shall make the arrangement for protection of possible fire and explosion hazards during manufacturing process in material handling.
Action Taken	The facility has been surrounded with high pressure fire hydrant points and hydrant monitors, appropriate type of extinguishers have already been provided on each points in plant. All electrical equipments and fittings are flameproof. Proper earthing have been provided to equipment and solvent piping.

Point No.29	Provision shall be made for the housing for the construction labor within the site with all necessary infrastructure and facilities such as cooking, mobile toilets, mobile sewage treatment plant, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structure to be removed after the completion of the project. All the construction wastes shall be managed so that there is no impact on the surrounding environment.
Action Taken	Necessary facilities had been provided to the construction workers. Local workers were engaged during construction work. Construction wastes had been managed effectively.

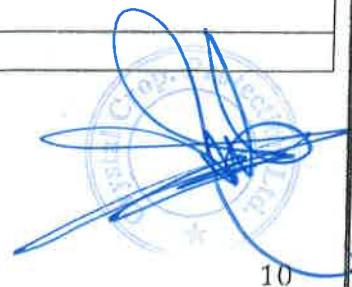
B. Compliance to General Conditions

Point No.1	The project authorities shall strictly adhere to the stipulations made by the Haryana State Pollution Control Board.
Action Taken	We will Comply with the stipulations made by the Haryana State Pollution Control Board. CTO has been obtained from HSPCB vide letter No. HSPCB/Consent/ : 3131009122SONCTO25868033 which is valid till 30.09.2024, copy is enclosed as Annexure-V

Point No.2	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 the 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.
Action Taken	Noted Sir

Point No.3	The locations of ambient air quality monitoring stations shall be decided in consultation with the Haryana State Pollution Control Board (HSPCB) and it shall be ensured that at least one station is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.
Action Taken	The locations of ambient air quality monitoring stations has already been decided in consultation with the Haryana State Pollution Control Board (HSPCB).

Point No.4	The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise level shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 Viz. 75 dBA (day time) and 70 dBA (night time).
Action Taken	Stipulated standards are being maintained.



Point No.5	The company shall harvest rainwater from the roof-tops of the buildings and storm water drains to recharge the ground water and use the same water for the process activities of the project to conserve fresh water.
Action Taken	Since floor water harvesting is risky in pesticide industry thus we have adopted roof-water harvesting system.

Point No.6	During transfer of materials, spillages shall be avoided and garland drains be constructed to avoid mixing of accident spillage with domestic wastewater and storm water drains.
Action Taken	Spillage shall be avoided during the transfer of material, garland drains has been constructed to avoid mixing of accidental spillage with domestic wastewater and storm water drains.

Point No.7	Usage of personnel protection equipments by all employees/ workers shall be ensured.
Action Taken	Workers have been provided with personnel protection equipments for use during operation of the plant. Health and safety norms are being followed during all type of operation in the plant.

Point No.8	Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
Action Taken	Trainings are regularly being provided by own EHS team and external trainers. Medical checkups are also regularly being done by visiting Doctor.

Point No.9	The company shall also comply with all the environmental protection measures and safeguards proposed in the project report submitted to the ministry. All the recommendations made in the EIA/EMP in respect of environmental management, risk mitigation measures and public hearing relating to the project shall be implemented.
Action Taken	We will comply Sir.

Point No.10	The company shall undertake CSR activities and all relevant measures for improving the socio-economic conditions of the surrounding area.										
Action Taken	<p>Company has been contributing to various charitable trusts which are into children education, farmers sustainability & development and healthcare activities. Company has been funding renowned NGO. Details from 1 July 2022 to 31 December 2022 are given below;</p> <table border="1"> <thead> <tr> <th>DETAILS OF EXPENSES</th><th>Amount (Rs.)</th></tr> </thead> <tbody> <tr> <td>1. Promoting healthcare and sanitation.</td><td></td></tr> <tr> <td>2. Promoting education.</td><td></td></tr> <tr> <td>3. Miscellaneous activities as per CSR Policy.</td><td></td></tr> <tr> <td>Total</td><td>16938943.00</td></tr> </tbody> </table>	DETAILS OF EXPENSES	Amount (Rs.)	1. Promoting healthcare and sanitation.		2. Promoting education.		3. Miscellaneous activities as per CSR Policy.		Total	16938943.00
DETAILS OF EXPENSES	Amount (Rs.)										
1. Promoting healthcare and sanitation.											
2. Promoting education.											
3. Miscellaneous activities as per CSR Policy.											
Total	16938943.00										

Point No.11	The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
Action Taken	Necessary eco-developmental measures shall be adopted.

Point No.12	A separate Environment Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environment Management and Monitoring functions
Action Taken	Environment, Health & Safety Management Cell has been setup, a separate lab has been developed in plant.

Point No.13	The company shall earmark sufficient funds for recurring cost per annum to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.
Action Taken	We will Comply Sir

Point No.14	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zila Parishad Municipal Corporation, Urban local Body and the local NGO, if any, from who suggestions/ representations, if any, were received while processing the proposal.
Action Taken	No such suggestion were received

Point No.15	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environment Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the Haryana State Pollution Control Board. A copy of Environment Clearance and six monthly compliance status report shall be posted on the website of the company.
Action Taken	We are submitting the compliance report regularly to the concerned department.

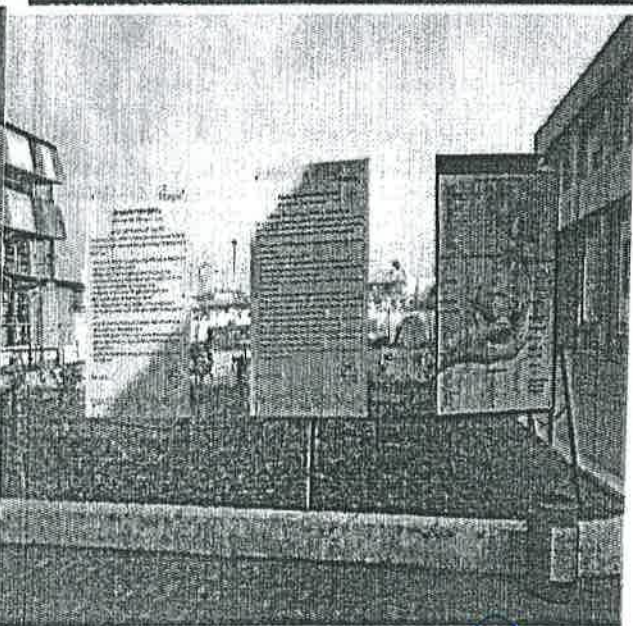
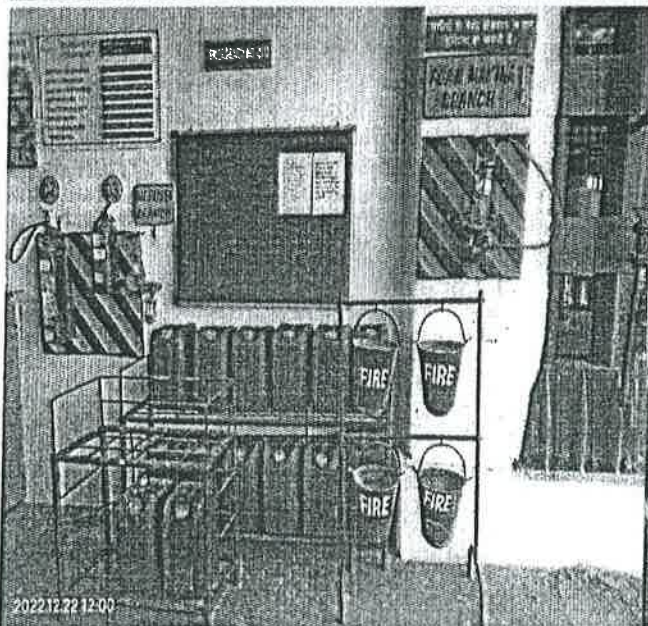
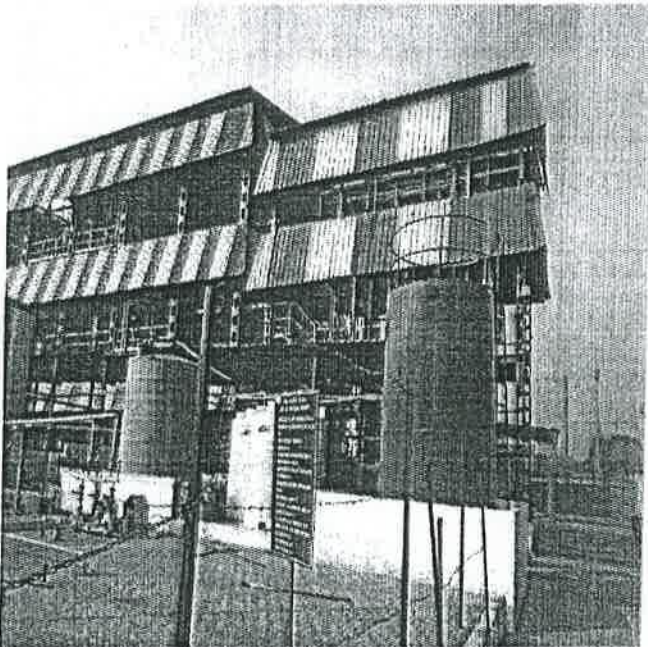
Point No.16	The environment statement for each financial year ending 31 st March in Form-V as is mandated shall be submitted to the Haryana State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the Chandigarh Regional Offices of MoEF by e-mail.
-------------	--

Action Taken	We are regularly submitting Environmental Statement on Form V, copy of the same is enclosed as Annexure X
--------------	---

Point No.17	The project proponent shall inform the public that the project has been accorded environment 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://envfor.nic.in , this shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.
Action Taken	We have already complied with the requirement.
Point No.18	The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.
Action Taken	Noted Sir

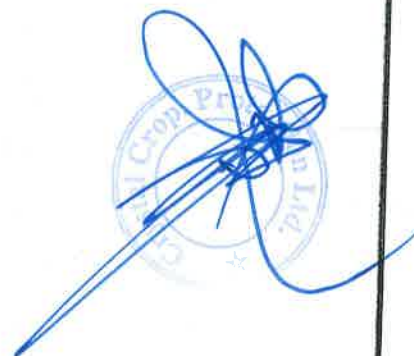


Annexure-2 Site Photographs
December 2022 Compliance Report



Handwritten signature and a circular stamp with the text "FISHI Corp." and a star symbol.

Annexure-3 Copy of Environmental Clearance
December 2022 Compliance Report

A handwritten signature in blue ink is written over a circular official stamp. The stamp contains the text "Central Pollution Control Board" and "Ministry of Environment, Forest and Climate Change" around a central emblem. The signature is a complex, stylized scribble.

F. No. J-11011/120/2011-IA II (I)
Government of India
Ministry of Environment and Forests
(I.A. Division)

Paryavaran Bhawan
CGO Complex, Lodhi Road
New Delhi - 110 003

E-mail : lk.bokolia@nic.in
Telefax : 011-2436 6017
Dated 23rd May, 2012

To,

M/s Crystal Phosphate Ltd.
M-5, GI/17, Industrial Area,
G.T. Karnal Road,
Azadpur Delhi-110033.

E-mail: publicaffairs@crystalphosphates.com; Fax No.: 011-27118885

Subject: Expansion of the existing Pesticide Formulation Plant (90 MTPD) by installing Pesticide Manufacturing Unit (21 MTPD) at Village Nathupur, District Sonapat, Haryana by M/s Crystal Phosphates Limited – Environmental Clearance reg.
Ref. : Your letter no. nll dated 5th February, 2011.

Sir,

Kindly refer your letter dated 5th February, 2011 alongwith project documents including Form I, Terms of References, Pre-feasibility Report, EIA/EMP Report alongwith Public Hearing Report and subsequent submission of additional information vide letter dated 27th April, 2011, 13th June, 2011 and 10th October, 2011 regarding above mentioned project.

2.0 The Ministry of Environment and Forests has examined the application. It is noted that proposal is for expansion of the existing pesticide formulation plant (90 MTPD) by installing Pesticide Manufacturing Unit (21 MTPD) at Village Nathupur, District Sonapat, Haryana by M/s Crystal Phosphates Limited. Total plot area is 18,005 m². Total project cost is Rs. 15.00 Crores. Protected forest is located at 5.5 Km and reserve forest is located at 9 Km. Following products will be manufactured:

S. N.	Product	Capacity
1	2,4-D Ethyl Ester Tech	2 MTPD
2	Glyphosate Tech	5 MTPD
3	Pretilachlor / Butachlor Tech	3.4 MTPD
4	Sulfosulfuron Tech	20 MTPA or 0.67 MTPD
5	Cypermethrin	200 MTPA or 0.67 MTPD
6	Metribuzin Tech	40 MTPA or 0.134 MTPD
7	Neonicotinamides i.e. Imidacloprid, Acetamiprid, Thiomethaxam	1 MTPD
8	Syntetic Pyrethroides i.e. Lambda Cyhalothrin	2 MTPD
9	Propiconazoles	2 MTPD
10	Copper Oxy Chloride Technical	1 MTPD
11	Mataxyl Technical	0.5 MTPD
12	Acephate Technical	1.5 MTPD
13	Ethephone Technical	0.7 MTPD
14	Tricycloazoles	0.5 MTPD
15	Clodinofof propargy Technical	1.5 MTPD
	Total	21 MTPD

3.0 Stack of adequate height will be provided to oil fired thermic fluid heater and steam boiler (2 TPH). Process emissions will be scrubbed by two stage/three stage alkali scrubber. Total fresh water requirement from ground water source will be 23 m³/day. Industrial wastewater generation will be 8.3 m³/day and segregated into high COD/organic waste, high COD/TDS and low COD/TDS effluent streams. High COD/organic waste/ toxic aqueous effluent will be incinerated. High COD/TDS effluent stream will be passed through stripper and evaporated through MEE. Low COD/TDS effluent stream will be treated in effluent treatment plant (ETP) followed by reverse osmosis (RO) and RO reject will be incinerated and treated water recycled/reused to achieve zero discharge. ETP sludge and MEE residue salt will be sent to treatment storage disposal facility (TSDF) for hazardous waste. Waste oil/spent oil will be sold to registered recyclers/re-processors.

4.0 Public Hearing / Public Consultation meeting was conducted on 21st December, 2010.

5.0 All units producing technical grade pesticides are listed at S.N. 5(b) under category 'A' and appraised at Central level.

6.0 The proposal was considered by the Expert Appraisal Committee (Industry-2) in its 84th, 26th and 30th meetings held during 21st August, 2008, 28th-30th July, 2011 and 15th-16th December, 2011 respectively. The Committee recommended the proposal for environmental clearance.

7.0 Based on the information submitted by the project proponent, the Ministry of Environment and Forests hereby accords environmental clearance to above project under the provisions of EIA Notification dated 14th September 2006, subject to the compliance of the following Specific and General Conditions:

A. SPECIFIC CONDITIONS:

- i) National Emission Standards for Pesticide Manufacturing and Formulation Industry issued by the Ministry vide G.S.R. 46(E) dated 3rd February, 2006 and amended time to time shall be followed by the unit.
- ii) Permission shall be obtained from the State Forest Department regarding the impact of the proposed project on the surrounding reserve forest.
- iii) Stack of adequate height shall be provided to oil fired thermic fluid heater and steam boiler. Online oxygen analyzer shall be installed to ensure air/fuel ratio and combustion efficiency.
- iv) As proposed, process fumes shall be scrubbed by two stage/three stage alkali scrubber. The scrubbing media shall be sent to effluent treatment plant (ETP) for treatment. Efficiency of air pollution control device shall be monitored regularly and maintained properly. At no time, the emission levels shall go beyond the prescribed standards. The system shall be interlocked with the pollution control equipments so that in case of any increase in pollutants beyond permissible limits, plant shall be automatically stopped. Stack monitoring shall be done regularly and report shall be submitted to Haryana State Pollution Control Board (HSPCB) and the Ministry's regional office at Chandigarh.
- v) In order to control odour, outlet of process vents shall be connected to the incinerator.
- vi) The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed by the unit.
- vii) In plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Fugitive emissions shall be controlled by providing closed storage, closed handling & conveyance of chemicals/materials, multi cyclone separator and water sprinkling system. Dust suppression system including water sprinkling system

shall be provided at loading and unloading areas to control dust emissions. Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall be regularly monitored and records maintained. The emissions shall conform to the limits stipulated by the HSPCB.

viii) For further control of fugitive emissions, following steps shall be followed :

1. Closed handling system shall be provided for chemicals.
2. Reflux condenser shall be provided over reactor.
3. System of leak detection and repair of pump/pipeline based on preventive maintenance.
4. The acids shall be taken from storage tanks to reactors through closed pipeline. Storage tanks shall be vented through trap receiver and condenser operated on chilled water.
5. Cathodic protection shall be provided to the underground solvent storage tanks.

ix) A proper Leak Detection And Repair (LDAR) Program for pesticide industry shall be prepared and implemented as per CPCB guidelines. Focus shall be given for prevention of fugitive emissions for which preventive maintenance of pumps, valves, pipelines are required. Proper maintenance of mechanical seals of pumps and valves shall be given. A preventive maintenance schedule for each unit shall be prepared and adhered to.

x) Continuous monitoring system for VOCs shall be installed at all important places/areas. Effective measures shall be taken immediately, when monitoring results indicate above the permissible limits.

xi) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution.

xii) The company shall upload the status of compliance of the stipulated environmental clearance conditions, including results of monitored data on its website and shall update the same periodically. It shall simultaneously be sent to the Regional office of MOEF, the respective Zonal office of CPCB and the HSPCB. The levels of PM₁₀, SO₂, NO_x, VOC, HCl and HC (Methane and Non-methane) in ambient air and emissions from the stacks shall be monitored and displayed at a convenient location near the main gate of the company and at important public places.

xiii) Chilled brine circulation system shall be provided to condensate solvent vapors and reduce solvent losses. It shall be ensured that solvent recovery should not be less than 95%.

xiv) Solvent management shall be carried out as follows :

- i. Reactor shall be connected to chilled brine condenser system
- ii. Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
- iii. The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery
- iv. Solvents shall be stored in a separate space specified with all safety measures.
- v. Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
- vi. Entire plant shall be flame proof. The solvent storage tanks should be provided with breather valve to prevent losses.

xv) Total water requirement from ground water source shall not exceed 23 m³/day and prior permission shall be obtained from the CGWA/SGWA.

- xvi) Industrial wastewater generation shall not exceed 8.3 m³/day. Total process effluent (8.3 m³/day) shall be segregated into high COD/organic waste, high COD/TDS and low COD/TDS effluent streams. High COD/organic waste/ toxic aqueous effluent shall be incinerated. High COD/TDS effluent stream shall be passed through stripper and evaporated through MEE. Low COD/TDS effluent stream shall be treated in effluent treatment plant (ETP) followed by RO and treated water shall be used in boiler, washing etc to achieve zero discharge. Domestic wastewater should be treated in STP. Water quality of treated effluent shall be monitored regularly.
- xvii) No effluent shall be discharged outside the premises and 'Zero' discharge concept shall be adopted.
- xviii) Incinerator comprising primary and secondary chamber shall be designed as per CPCB guidelines. SO₂, NO_x, HCl and CO emissions shall be monitored in the stack regularly.
- xix) Hazardous chemicals shall be stored in tanks in tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm. Solvent transfer shall be by pumps.
- xx) The company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans-Boundary Movement) Rules, 2008 and amended as on date for management of Hazardous wastes and prior permission from HSPCB shall be obtained for disposal of solid / hazardous waste in the TSDF. Measures shall be taken for fire fighting facilities in case of emergency. Membership of TSDF for hazardous waste disposal shall be obtained.
- xxi) As proposed, ETP sludge and evaporation residue shall be sent to TSDF site. High calorific value waste such as spent organic shall be sent to cement factory/incinerated.
- xxii) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended in October, 1994 and January, 2000. All Transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
- xxiii) The company shall undertake following waste minimization measures:-
 - a. Metering and control of quantities of active ingredients to minimize waste.
 - b. Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - c. Use of automated filling to minimize spillage.
 - d. Use of Close Feed system into batch reactors.
 - e. Venting equipment through vapour recovery system.
 - f. Use of high pressure hoses for equipment cleaning to reduce wastewater generation.
- xxiv) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.
- xxv) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- xxvi) Green belt shall be developed at least in 33 % of the plant area in and around the plant premises to mitigate the effects of fugitive emissions all around the plant as per the CPCB guidelines in consultation with DFO. Thick greenbelt with suitable plant species shall be developed around the proposed pesticide unit to mitigate the odour problem. Selection of plant species shall be as per the CPCB guidelines.

- xxvii) All the commitments made during the Public Hearing / Public Consultation meeting held on 21st December, 2010 shall be satisfactorily implemented and adequate budget provision should be made accordingly.
- xxviii) The company shall make the arrangement for protection of possible fire and explosion hazards during manufacturing process in material handling.
- xxix) Provision shall be made for the housing for the construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile sewage treatment plant, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structure to be removed after the completion of the project. All the construction wastes shall be managed so that there is no impact on the surrounding environment.

B. GENERAL CONDITIONS:

- i. The project authorities shall strictly adhere to the stipulations made by the Haryana State Pollution Control Board.
- ii. 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.
- iii. The locations of ambient air quality monitoring stations shall be decided in consultation with the Haryana State Pollution Control Board (HSPCB) and it shall be ensured that at least one station is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.
- iv. The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures 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 70 dBA (night time).
- v. The Company shall harvest rainwater from the roof-tops of the buildings and storm water drains to recharge the ground water and use the same water for the process activities of the project to conserve fresh water.
- vi. During transfer of materials, spillages shall be avoided and gulland drains be constructed to avoid mixing of accidental spillages with domestic wastewater and storm water drains.
- vii. Usage of Personnel Protection Equipments by all employees/ workers shall be ensured.
- viii. Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
- ix. The company shall also comply with all the environmental protection measures and safeguards proposed in the project report submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, risk mitigation measures and public hearing relating to the project shall be implemented.



fu?

10.0 The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.


(Lalit Bokolia)
Joint Director

Copy to :-

1. The Principal Secretary, Environment Department, Government of Haryana, SCO 1-2-3, Sector 17-D (2nd Floor), Chandigarh.
2. The Chief Conservator of Forests (Central), Regional Office (Northern Zone), Bay No.24-25, Sector 31-A, Dakshin Marg, Chandigarh-160030.
3. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
4. The Chairman, Haryana State Pollution Control Board, C-11, Sector-6, Panchkula.
5. The Joint Secretary, IA Division, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
6. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
7. Guard File/Monitoring File/Record File.

(Lalit Bokolia)
Joint Director



F. No. J-11011/120/2011-IA-II(I)
Government of India
Ministry of Environment, Forest and Climate Change
(IA- II Section)

Indira Paryavaran Bhawan
Jorbagh Road, New Delhi - 3

Dated: 13th April, 2018

To

M/s Crystal Crop Protection Limited
B-95, Wazirpur Industrial Area
Wazirpur, Delhi - 110052

Sub: Expansion of Pesticide Formulation Plant at Village Nathupur, District Sonapat (Haryana) - Transfer of Environmental Clearance from M/s Crystal Phosphates Limited to M/s Crystal Crop Protection Limited - reg.

Sir,

This has reference to your proposal No. IA/HR/IND2/48163/2012 dated 8th March, 2018, regarding transfer of environmental clearance from M/s Crystal Phosphates Limited to M/s Crystal Crop Protection Limited.

2. The Ministry had earlier granted environmental clearance vide letter dated 23rd May, 2012 to the project for expansion of the existing Pesticide Formulation Plant (90 MTPD) by installing Pesticide Manufacturing Unit (21 MTPD) at Village Nathupur, District Sonapat (Haryana), in favour of M/s Crystal Phosphates Limited.

3. M/s Crystal Crop Protection Limited vide letter dated 8th March, 2018 have informed that M/s Crystal Phosphates Limited was amalgamated with M/s Crystal Crop Protection Pvt Ltd through a scheme of arrangements approved by Hon'ble High Court of Delhi vide order dated 2nd August, 2011. Thereafter, upon conversion from private company to public company, name was changed to M/s Crystal Crop Protection Limited, vide Registrar of Companies certificate of incorporation dated 3rd January, 2018, and thus necessitating transfer of all requisite approvals in the new name of the company.

4. M/s Crystal Crop Protection Limited has submitted an affidavit to abide by the terms and conditions stipulated in the environmental clearance dated 23rd May, 2012 issued in the name of M/s Crystal Phosphates Limited.

5. As per the relevant provisions of the EIA Notification, 2006, the environmental clearance granted by the Ministry vide letter dated 23rd May, 2012 to the project 'Expansion of the existing Pesticide Formulation Plant (90 MTPD) by installing Pesticide Manufacturing Unit (21 MTPD)' at Village Nathupur, District Sonapat (Haryana), is hereby transferred from M/s Crystal Phosphates Limited to M/s Crystal Crop Protection Limited, on the same terms and conditions under which prior environmental clearance was initially granted and for the same validity period.

6. This issues with approval of the competent authority.

(S. K. Srivastava)
Scientist E

Copy to:-

1. The Additional PCCF (C), MoEF&CC Regional Office (NZ), Bays No. 24-25, Sector 31 A, Dakshin Marg, Chandigarh - 30

2nd Floor, Chandigarh

3. The Member Secretary, Central Pollution Control Board, Panchsheel Park, Connaught Place, New Delhi - 110029
4. The Member Secretary, Haryana State Pollution Control Board, C-11, Sector-6, Panchkula - 132109 (Haryana)
5. Guard File/Monitoring File/Website/Record File

Sd/-
12/11/2019
(S. K. Srivastava)
Scientist E



F. No. J-11011/120/2011-IA-II(I)
Government of India
Ministry of Environment, Forest and Climate Change
(IA- II Section)

Indira Paryavaran Bhawan
Jorbagh Road, New Delhi -3

Dated: 16th April, 2018

To

M/s Crystal Crop Protection Limited
B-95, Wazirpur Industrial Area
Wazirpur, Delhi - 110 052

Sub: Expansion of Pesticide Formulation Plant by installing Pesticide Manufacturing Unit at Village Nathupur, District Sonapat (Haryana) by M/s Crystal Crop Protection Limited - Amendment in Environmental Clearance - reg.

Sir,

This has reference to your proposal No. IA/HR/IND2/48163/2012 dated 27th September, 2016, on the above subject matter.

2. The Ministry had earlier granted environmental clearance vide letter dated 23rd May, 2012 to the project for expansion of the existing Pesticide Formulation Plant (90 MTPD) by installing Pesticide Manufacturing Unit (21 MTPD) at Village Nathupur, District Sonapat (Haryana), in favour of M/s Crystal Phosphates Limited.
 3. The project proponent has sought amendment in the said environmental clearance for change in product mix of pesticide manufacturing unit and to add 32 more products with reduction in production capacity from the present 21 TPD to 17.75 TPD. It is informed that there would be no increase in pollution load in respect of effluent, solid waste and air pollutant, and the total production shall not exceed the consented capacity.
 4. The proposal for amendment in environmental clearance was considered by the Expert Appraisal Committee (Industry-2) in its meeting held on 26-29 December, 2016 in the Ministry. The Committee noted that the proposal is attracting the Ministry's Notification S.O. No. 3518(E) dated 23rd November, 2016, and recommended the proposal, subject to submission of 'No Pollution Load Certificate' from the State Pollution Control Board.
- As per the recommendations of the Committee, the project proponent has submitted a letter No. HSPCB/SR/2017/6093 dated 20th December, 2017 issued by Haryana State Pollution Control Board mentioning that the net quantity of effluent and source of air emission will remain same after the change in product as per the list submitted by the unit in MoEF&CC.
5. The Ministry's Notification S.O.3518(E) dated 23rd November, 2016 provides for exemption from the requirement of environmental clearance for any change in the product mix, change in quantities within products or number of products in the same category for which environmental clearance has been granted, provided that there is no change in the total capacity sanctioned in prior environmental clearance granted earlier under this Notification and there is no increase in pollution load. In such cases, as per the provisions contained therein, the project proponent need to obtain No Increase in Pollution Load certificate from the concerned State Pollution Control Board.

6. In view of the above and as per the information made available by the project proponent, there seems no requirement of amendment in the environmental clearance dated 23rd May, 2012, for the revised scope of work as stated in para 3.

7. This issues with approval of the competent authority.

SK
16/4/2018
(S. K. Srivastava)
Scientist E

Copy to:-

1. The Additional PCCF (C), MoEF&CC Regional Office (NZ), Bays No. 24-25, Sector 31 A, Dakshin Marg, Chandigarh - 30
2. The Member Secretary, Haryana State Pollution Control Board, C-11, Sector-6, Panchkula - 9 (Haryana)
3. Guard File/Monitoring File/Website/Record File



SK
16/4/2018
(S. K. Srivastava)
Scientist E

A circular stamp of the Haryana State Pollution Control Board, Panchkula, with a large blue signature over it. The text around the border reads "Haryana State Pollution Control Board, Panchkula". In the center, there is a star and the text "H.S.P.C.B." and "Panchkula".

Annexure-4. Copy of NOC
December 2022 Compliance Report





HARYANA STATE POLLUTION CONTROL
BOARD
Star Complex, Opp. General Hospital, Delhi Road,
Sonapat Ph. 0130-2236119(O)

Website: www.hspcb.gov.in E-Mail : hspcb
Telephone No.: 0172-25

HSPCB Authorization
NOC (Tech. Plant)

No. HSPCB/Consent/ : 313100918SONCTE5292349

Dated:14/06/2018

To.

M/s : CRYSTAL CROP PROTECTION LTD TECHNICAL PLANT
VILLAGE NATHUPUR, DISTT. SONEPAT
SONIPAT
131029

**Sub. : Grant of consent to Establish to M/s CRYSTAL CROP
PROTECTION LTD TECHNICAL PLANT**

Please refer to your application no. 5292349 received on dated 2018-06-06 in regional office Sonipat.

With reference to your above application for consent to establish, M/s CRYSTAL CROP PROTECTION LTD TECHNICAL PLANT is here by granted consent as per following specification/Terms and conditions.

Consent Under	AIR/WATER
Period of consent	14/06/2018 - 13/06/2023
Industry Type	Pesticides (technical) (excluding formulation)
Category	RED
Investment(In Lakh)	1030.68005
Total Land Area (Sq. meter)	8119.0
Total Builtup Area (Sq. meter)	3226.0
Quantity of effluent	
1. Trade	15.0 KL/Day
2. Domestic	2.0 KL/Day
Number of outlets	2.0
Mode of discharge	
1. Domestic	Septic Tank
2. Trade	ETP
Permissible Domestic Effluent Parameters	
1. NA	
Permissible Trade Effluent Parameters	
1. BOD	30 mg/l
2. COD	250 mg/l
3. TSS	100 mg/l

Height of stack	
1. Attached to AECMN (3No)	
Permissible Emission parameters	
1. SPM	150 mg/m ³
Capacity of boiler	
1. Boiler	Ton/hr
Type of Furnace	
1. NA	
Type of Fuel	
1. Diesel	0.100 KL/day

Regional Officer, Sonapat
Haryana State Pollution Control Board.

Terms and conditions

1. The industry has declared that the quantity of effluent shall be 17 KL/Day i.e 15.0KL/Day for Trade Effluent, 0 KL/Day for Cooling, 2.0 KL/Day for Domestic and the same should not exceed.
2. The above 'Consent to Establish' is valid for 60 months from the date of its issue to be extended for another one year at the discretion of the Board or till the time the unit starts its trial production whichever is earlier. The unit will have to set up the plant and obtain consent during this period.
3. The officer/official of the Board shall have the right to access and inspection of the industry in connection with the various processes and the treatment facilities being provided simultaneously with the construction of building/machinery. The effluent should conform the effluent standards as applicable.
4. That necessary arrangement shall be made by the industry for the control of Air Pollution before commissioning the plant. The emitted pollutants will meet the emission and other standards as laid/will be prescribed by the Board from time to time.
5. The applicant will obtain consent under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21/22 of the Air (Prevention & Control of Pollution) Act, 1981 as amended to-date-even before starting trial production.
6. The above Consent to Establish is further subject to the conditions that the unit complies with all the laws/rules/decisions and competent directions of the Board/Government and its functionaries in all respects before commissioning of the operation and during its actual working strictly.
7. No in-process or post-process objectionable emission or the effluent will be allowed, if the scheme furnished by the unit turns out to be defective in any actual experience.
8. The Electricity Department will give only temporary connection and permanent connection to the unit will be given after verifying the consent granted by the Board, both under Water Act and Air Act.
9. Unit will raise the stack height of DG Set/Boiler as per Board's norms.
10. Unit will maintain proper logbook of Water meter/sub meter before/after commissioning.



11. That in the case of an industry or any other process the activity is located in an area approved and that in case the activity is sited in a residential or institutional or commercial or agricultural area, the necessary permission for siting such industry and process in a residential or institutional or commercial or agricultural area or controlled area under Town and Country Planning laws, C.U. or Municipal laws has to be obtained from the competent Authority in law permitting this deviation and be submitted in original with the request for consent to operate.
12. That there is no discharge directly or indirectly from the unit or the process into any interstate river or Yamuna River or River Ghaggar.
13. That the industry or the unit concerned is not sited within any prohibited distances according to the Environmental Laws and Rules, Notification, Orders and Policies of Central Pollution control Board and Haryana State Pollution Control Board.
14. That of the unit is discharging its sewage or trade effluent into the public sewer meant to receive trade effluent from industries etc. then the permission of the Competent Authority owing and operating such public sewer giving permission letter to his unit shall be submitted at time of consent to operate.
15. That if at any time, there is adverse report from any adjoining neighbor or any other aggrieved party or Municipal Committee or Zila Parishad or any other public body against the unit's pollution; the Consent to Establish so granted shall be revoked.
16. That all the financial dues required under the rules and policies of the Board have been deposited in full by the unit for this Consent to Establish.
17. In case of change of name from previous Consent to Establish granted, fresh Consent to Establish fee shall be levied.
18. Industry should adopt water conservation measures to ensure minimum consumption of water in their Process. Ground water based proposals of new industries should get clearance from Central Ground Water Authority for scientific development of previous resource.
19. That the unit will take all other clearances from concerned agencies, whenever required.
20. That the unit will not change its process without the prior permission of the Board.
21. That the Consent to Establish so granted will be invalid, if the unit falls in Aravali Area or non conforming area.
22. That the unit will comply with the Hazardous Waste Management Rules and will also make the non-leachate pit for storage of Hazardous waste and will undertake not to dispose off the same except for pit in their own premises or with the authorized disposal authority.
23. That the unit will submit an undertaking that it will comply with all the specific and general conditions as imposed in the above Consent to Establish within 30 days failing which Consent to Establish will be revoked.
24. That unit will obtain EIA from MoEF, if required at any stage.
25. In case of unit does not comply with the above conditions within the stipulated period, Consent to Establish will be revoked.
26. That unit will obtain consent to operate from the board before the start of product activity.

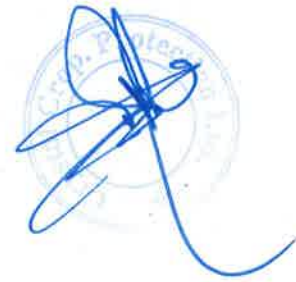
Specific Conditions

Other Conditions :

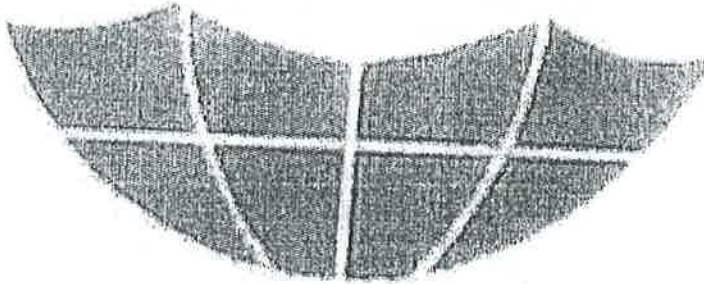


1. That the CTE granted is subject to the condition that Unit will change its product mix without change in its plant capacity, quantity & quality of trade effluent/air emissions, and manufacturing process. 2. That unit will obtained CTO prior to the Commissioning of the unit. 3. That the CTE shall be valid up to five years or Date of commissioning whichever is earlier. 4. Unit will obtain prior permission from the board before installing any new polluting process. 5. That the CTE so granted shall become invalid in case of violation of any of the above / any law of the land. 6. That the unit will comply with all the provisions of Hazardous & Other Waste Rules and will make agreement with Authorized Recycler of the Board for scientific disposal of Hazardous Waste. 7. Unit will take all necessary required permissions from other departments as applicable before commissioning.

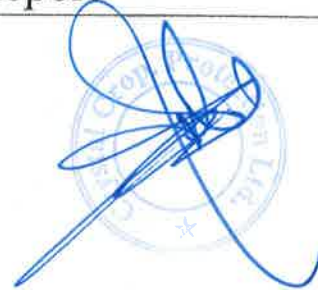
*Regional Officer, Sonapat
Haryana State Pollution Control Board.*



HARYANA STATE



Annexure-5 Copy of CTO from HSPCB
December 2022 Compliance Report





**HARYANA STATE POLLUTION CONTROL
BOARD**

Star Complex, Opp. General Hospital, Delhi Road,
Sonapat Ph. 0130-2236119(O) Email:-

hspcbrosr@gmail.com

E-mail: hspcb@hry.nic.in



No. HSPCB/Consent/ : 313100922SONCTO25868033

Dated:24/08/2022

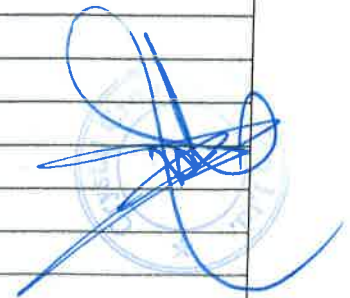
To,

M/s :CRYSTAL CROP PROTECTION LTD TECHNICAL PLANT
VILLAGE NATHUPUR, DISTT. SONEPAT

Subject: Grant of consent to operate to M/s CRYSTAL CROP PROTECTION LTD
TECHNICAL PLANT.

Please refer to your application no. 25868033 received on dated 2022-06-30 in regional office Sonipat. With reference to your above application for consent to operate, M/s CRYSTAL CROP PROTECTION LTD TECHNICAL PLANT is here by granted consent as per following specification/Terms and conditions.

Consent Under	BOTH
Period of consent	01/10/2022 - 30/09/2024
Industry Type	Pesticides (technical) (excluding formulation)
Category	RED
Investment(In Lakh)	1030.6801
Total Land Area(Sq. meter)	8119.0
Total Builtup Area(Sq. meter)	3826.0
Quantity of effluent	
1. Trade	15.0 KL/Day
2. Domestic	2.0 KL/Day
Number of outlets	2.0
Mode of discharge	
1. Domestic	Septic Tank
2. Trade	ETP
Domestic Effluent Parameters	
1. NA	
Trade Effluent Parameters	
1. BOD	30 mg/l
2. COD	250 mg/l
3. TSS	100 mg/l
4. O&G	10 mg/l
5. pH	5.5-9.0
Number of stacks	3
Height of stack	



1. Attached to Boiler	30 Meter
2. Attached to Incinerator	30 Meter
3. Attached to Process emission	16 Meter
Emission parameters	
1. SPM	150 mg/m ³
2. SPM	1200 mg/m ³
Product Details	
1. ay 1 1 1 1 Imidachloprid	Metric Tonnes/day
Metric Tonnes/Day 1 1 1 1	
Clothianidin Metric	
Tonnes/Day 1 1 1 1	
Cypermethr	
Capacity of boiler	
1. Boiler	2 Ton/hr
Type of Furnace	
1. Na	
Type of Fuel	
1. Diesel	0.100 KL/day
2. Wood	9 Ton/day
Raw Material Details	
2 chloro 5 chloromethylthiazole	Metric Tonnes/Day
0.74 Metric Tonnes/Day	
3 methyl 4 nitroimino	
perhydro 1 3 5	
oxadiazine 0.74 Metric	
Tonnes/Day Caustic	
Soda 0.2 Metric	
Tonnes/Day DMF 0.3	
Metric Tonnes/Day	
Methanol 0.25 Metric	
Tonnes/Day 2 Chloro 5	
(methylamino methyl)	



Regional Officer, Sonipat
Haryana State Pollution Control Board.

Terms and conditions

1. The applicants shall maintain good house keeping both within factory and in the premises. All hose pipelines valves, storage tanks etc. shall be leak proof. In plant allowable pollutants levels, if specified by State Board should be met strictly.
2. The applicant/company shall comply with and carry out directive/orders issued by the Board in this consent order at all subsequent times without negligence of his /its part. The applicant/company shall be liable for such legal action against him as per provision of the law/act in case of violation of any order/directives. Issued at any time and or non compliance of the terms and conditions of his consent order.
3. The applicant shall make an application for grant of consent at least 90 days before the date of expiry of this consent.

4. Necessary fee as prescribed for obtaining renewal consent shall be paid by the applicant alongwith the consent application.
5. If due to any technological improvement or otherwise this Board is of opinion that all or any of the conditions referred to above required variation (including the change of any control equipment either in whole or in part) this Board shall after giving the applicant an opportunity of being heard vary all or such condition and there upon the applicant shall be bound to comply with the conditions so varied.
6. The industry shall provide adequate arrangement for fighting the accidental leakages, discharge of any pollutants gas/liquids from the vessels, mechanical equipment etc. which are likely to cause environment pollution.
7. The industry shall comply noise pollution (Regulation and control) Rules, 2000.
8. The industry shall comply all the direction/Rules/Instructions as may be issued by the MOEF/CPCB/HSPCB from time to time.
9. The industry shall ensure that various characteristics of the effluents remain within the tolerance limits as specified in EPA Standard and as amended from time to time and at no time the concentration of any characteristics should exceed these limits for discharge.
10. The industry would immediately submit the revised application to the Board in the event of any change in the raw material in process, mode of treatment/discharge of effluent. In case of change of process at any stage during the consent period, the industry shall submit fresh consent application alongwith the consent to operate fee, if found due, which may be on any account and that shall be paid by the industry and the industry would immediately submit the consent application to the Board in the event of any change during the year in the raw material, quantity, quality of the effluent, mode of discharge, treatment facilities etc.
11. The officer/official of the Board shall reserve the right to access for the inspection of the industry in connection with the various process and the treatment facilities. The consent to operate is subject to review by the Board at any time.
12. Permissible limits for any pollutants mentioned in the consent to operate order should not exceed the concentration permitted in the effluent by the Board.
13. The industry shall pay the balance fee, in case it is found due from the industry at any time later on.
14. If the industry fails to adhere to any of the conditions of this consent to operate order, the consent to operate so granted shall automatically lapse.
15. If the industry is closed temporarily at its own, they shall inform the Board and obtain permission before restart of the unit.
16. The industry shall comply all the Directions/ Rules/Instructions issued from time to time by the Board.

Specific Conditions :

NAVEEN
GULIA

Regional Officer, Sonapat

Haryana State Pollution Control Board.

Digitally signed by NAVEEN
GULIA
Date: 2022.06.24 10:04:17
+05'30





Haryana State Pollution Control Board
Star Complex, Opp. General Hospital, Delhi Road, Sonapat Ph. 0130-
2236119(O) Email:- hspcbrosr@gmail.com

Application no. 5745536
Industry id: 14SON845142
Date: 26/08/2022



No. :HWM/SON/2022/5745536

DT: 26/08/2022

To

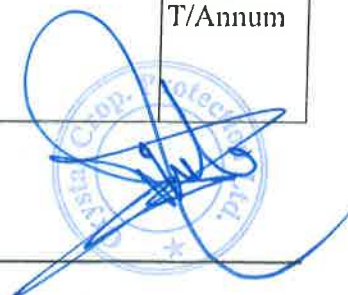
M/s CRYSTAL CROP PROTECTION LTD TECHNICAL PLANT
VILLAGE NATHUPUR, DISTT. SONEPAT
Sonipat

Sub: Grant of Authorization under Hazardous and Other Wastes(Management & Transboundry Movement) Rules, 2016

1. Reference of application:5745536 dated: 26/08/2022
2. MAHENDER SINGH MALIK of CRYSTAL CROP PROTECTION LTD TECHNICAL PLANT is hereby granted an authorization for generation, collection, storage, incineration on the premises situated at VILLAGE NATHUPUR, DISTT. SONEPAT

Details of Authorization

S.No.	Name of process and Category of Hazardous Waste as per the Schedules I, II and III of these rules	Authorised mode of disposal or recycling or utilisation or co-processing, etc.	Quantity
1	Industrial operations using mineral/synthetic oil as lubricant in hydraulic systems or other applications, Used/spent oil	Through Authorized Recycler	0.4 KL/Annum
2	Production, and formulation of pesticides including stock-piles, Process wastes/residues	Through GEPIL	14 T/Annum
3	Purification and treatment of exhaust air, water and waste water from the treatment plants (CETP's), Chemical sludge from waste water treatment	Through GEPIL	14 T/Annum
4	Handling of Hazardous chemicals and wastes, Contaminated cotton rags or other cleaning materials	Through GEPIL	0.05 T/Annum
5	Hazardous waste treatment processes, e.g. pre-processing , incineration and concentration, Ash from incinerator and flue gas cleaning residue	Through GEPIL	0.150 T/Annum



6	production and/or industrial use of solvents, Distillation residues	Through GEPIL	3 T/Annum
---	--	---------------	--------------

1. The authorization shall be valid for a period of 01/10/2022 to 30/09/2024
2. The authorization is subject to the following general and specific conditions :-

- (i) **1. The unit will comply with provision of all applicable Acts/Rules/Direction of the Board/CPCB. 2. The unit will submit the Annual Report under HWM Rules by 30th June. 3. Unit will apply for renewal of consent/Authorization at least 90 days before expiry date of the consent/Authorization. 4. The unit will renew agreement with authorized recycler timely. 5. The hazardous waste generated by the unit will be disposed off only through Authorized TSDF/recyclers / Refiners of hazardous waste.**

**Regional Officer Sonipat
For Haryana State Pollution Control Board**

Conditions of Authorization:

1. The authorised person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.
2. The authorization or its renewal shall be produced for inspection at the request of an officer authorised by the State Pollution Control Board.
3. The person authorised shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorization.
4. Any unauthorised change in personnel equipment or working conditions as mentioned in the application by the person authorised shall constitute a breach of this authorization.
5. The person authorised shall implement Emergency Response Procedure (ERP) for which this authorization is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time.
6. The person authorised shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty".
7. An application for the renewal of an authorization shall be made as laid down under these Rules.
8. Any other conditions for compliance as per the guidelines issued by the Ministry of Environment, Forest and Climate Changes or Central Pollution Control Board from time to time.
9. Annual return shall be filed by June 30 th for the period ensuring 31 st March of the year.

Digitally signed by NAVEEN
GULIA
Date: 2022.08.26 18:34:32
+05'30'

**Regional Officer Sonipat
For Haryana State Pollution Control Board**



Annexure-6 Copy of Forest Permission
December 2022 Compliance Report



Annexure - VI

File No. 22 -

प्रेषक

उप वन संरक्षक,
सोनीपत।

सेवा में

किस्टल फास्फेट लि०,
गौ० व डा० नाथूपुर,
जिला सोनीपत।

क्रमांक/२०५३

दिनांक/२८/५/२०११

विषय:-

Clarification Regarding Applicability of Forest Laws on Non-Forest Land.

संदर्भ:-

आपका प्रार्थना-पत्र दिनांक १७/१०/२०११.

—00—

संदर्भांकित प्रार्थना-पत्र के सम्बन्ध में आपको सूचित किया जाता है कि वन राजिक अधिकारी, राई की रिपोर्ट अनुसार विषयांकित केस में वन संरक्षण अधिनियम १९८०/२००३ लागू नहीं होता है। अतः इस वन मण्डल को कोई आपत्ति नहीं है।

उप वन संरक्षक,
सोनीपत।



Annexure-7. Copy of Fire NOC
December 2022 Compliance Report



From Assistant Divisional Fire Officer/Fire Station Officer
MC Sonipat

To M/s Crystal Crop Protection Limited
Village Nathupur Distt Sonipat

Memo No. FS/2022/1406 dated : 04/11/2022

Subject: Renewal of Fire Safety Certificate Under 15 mtrs. height from the fire Safety Point of View of the Group G- Industrial Building at KH NO 16//6/3/2 15//1/2 6//1/2 16//6/1/1 6//2 6//3/1 15//1/3 15//2 16//1/1 16//2 17//20/2 16//5/2/2 AND KH NO 9//25/2/2 8//21/2 9//25/2/3 16//5/2/1 7//1/1 at Village Nathupur Distt Sonipat of Crystal Crop Protection Limited :

Reference to you online No 181312223001309 dated 27/10/2022 on the subject cited above.

Tower Name	Floor Detail	Height	Ground Coverage
A,B,C,D,E,F,G,H,I,J,K,L,M,N,O, P	G+2	14 M	240752.10 Sqft
Basement Level	Basement Area	Remarks	
-1	31849.68 Sqft	-	

Your site for the Renewal of the Fire Safety Certificate has been inspected by the Team of Fire Station Officers, MC Sonipat from fire safety Point of View. The means of escape and Fire Protection system were checked and found as per the National Building Code of India, Part- IV guidelines.

In view of the satisfactory fire protection system / arrangement mentioned as above, this office has no objection for occupation from the Fire Safety point of view, with the following conditions:-

- 1) The owner/occupier shall keep duly trained Fire Staff in all three shifts.
- 2) The Fire Protection System tested during inspection shall be maintained properly & always should be in good working condition.
- 3) If any lapse is found in the fire protection system at the time of inspection or detected during outbreak of fire, action will be taken as per rules against you.
- 4) You are directed to apply for Renewal of Fire Safety Certificate in future before 2 month of expiry of your Fire Safety Certificate.
- 5) The open set back area is not checked at our end as it shall be checked by concerned building department.
- 6) The owner/occupier shall strictly follow the other applicable rules/ regulations/ byelaws laid down regarding fire safety system. If you fail to comply with any of the above terms & conditions you will be liable to be punished as per Section 30,31 & 47 of fire & Emergency Services Act 2022.
- 7) You have to perform quarterly Fire Drill in your building as per NBC with intimation to Fire Department and video graphy evidence to be kept as a record which shall be produced at the time of next Renewal; Officials/Residents/R.W.A. should be mentioned in the drill.
- 8) If the Infringements of Byelaws remains un- noticed the Authority reserves the right to amend the Fire Safety Certificate as and when any such Infringements comes to notice after giving an opportunity of being heard and the Authority shall stand Indemnified against any claim on this account.
- 9) The owner or occupier of the building shall give a self-declaration certificate annually to the effect that the fire fighting system installed in his building is working in good condition and there is no addition/alteration in the building. The Fire Officer may randomly check such building. In case there is any addition/alteration beyond permissible limits under the Haryana Building Code, 2017, the fire safety certificate shall cease to exist and the owner shall apply for approval of revised Fire Fighting Scheme as per the provisions of section 18.

The above Renewal of Fire Safety Certificate is valid for **Three** year from the date of issue of this letter Applying renewal of the same well in time shall be the responsibility of owner/occupier.

Remarks:- File no 1032



Digitally signed by RAJENDER SINGH DAHIYA
Date: 2022.11.04 05:23:29 -07:00
Reason: Digital Verification
Exercising the power of Director, Fire Services, Haryana

Annexure-9. Copy of CGWA NOC
December 2022 Compliance Report





भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन, नदी विकास
और गंगा संरक्षण विभाग
केन्द्रीय भूमि जल प्राधिकरण
Government of India
Ministry of Jal Shakti
Department of Water Resources,
River Development & Ganga Rejuvenation
Central Ground Water Authority

(भूजल निकासी हेतु अनापत्ति प्रमाण पत्र)

NO OBJECTION CERTIFICATE (NOC) FOR GROUND WATER ABSTRACTION

Project Name:	Crystal Crop Protection Limited (technical Plant)		
Project Address:	Vpo: Nathupur, Distt: Sonipat		
Village:	Nathupur(56)	Block:	Rai
District:	Sonipat	State:	Haryana
Pin Code:			
Communication Address:	Vpo Nathupur, Tehsil: Rai, Rai, Sonipat, Haryana - 131029		
Address of CGWB Regional Office :	Central Ground Water Board North Western Region, Bhujal Bhawan, Plot No. 3b, Sector 27-a, Chandigarh, Chandigarh - 160019		

- | | | | |
|--|-----------------------------|-----------------|----------------|
| 1. NOC No.: | CGWA/NOC/IND/ORIG/2021/9853 | 3. Category: | Over Exploited |
| 2. Application No.: | 21-4/2795/HR/IND/2020 | (GWRE 2017) | |
| 4. Project Status: | Existing Project | 5. NOC Type: | New |
| 6. Valid from: | 23/12/2020 | 7. Valid up to: | 22/12/2022 |
| 8. Ground Water Abstraction Permitted: | | | |

Fresh Water		Saline Water		Dewatering		Total	
m ³ /day	m ³ /year	m ³ /day	m ³ /year	m ³ /day	m ³ /year	m ³ /day	m ³ /year
30.00	9000.00						

9. Details of ground water abstraction /Dewatering structures

Abstraction Structure*	Total Existing No.:1						Total Proposed No.:0					
	DW	DCB	BW	TW	MP	MPu	DW	DCB	BW	TW	MP	MPu
Abstraction Structure*	0	0	0	1	0	0	0	0	0	0	0	0

*DW- Dug Well; DCB-Dug-cum-Bore Well; BW-Bore Well; TW-Tube Well; MP-Mine Pit;MPu-Mine Pumps

- | | | | |
|---|--------------------|----------------------|---------------------|
| 10. Ground Water Abstraction/Restoration Charges paid (Rs.): | 108000.00 | | |
| 11. Number of Piezometers(Observation wells) to be constructed/ monitored & Monitoring mechanism. | No. of Piezometers | Monitoring Mechanism | |
| | Manual | DWLR** | DWLR With Telemetry |
| **DWLR - Digital Water Level Recorder | 1 | 1 | 0 |

(Compliance Conditions given overleaf)

This is an auto generated document & need not to be signed.



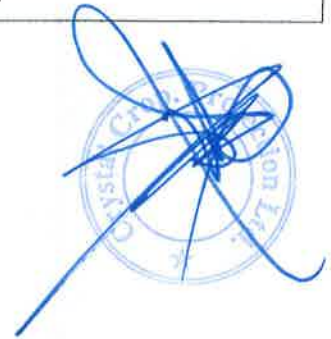
18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली - 110011 / 18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Phone: (011) 23383561 Fax: 23382051, 23386743

Website: cgwa-noc.gov.in

पानी बचाये - जीवन बचाये
SAVE WATER - SAVE LIFE

Annexure-9. Copy of Waste disposal Agreement with GEPIL
December 2022 Compliance Report





हरियाणा HARYANA

H 728058



THIS Agreement is made at Faridabad on this 05th day of DEC. 2019

BY AND BETWEEN

Gujarat Enviro Protection and Infrastructure (Haryana) Pvt. Ltd., a company incorporated and registered under the provisions of the Companies Act, 1956 and having its registered office at 370, S V P Road, Shop 8, Plot 384, Cigaretwala Bldg. Opp. CBI Prathna Samaj, Nr. Harkishandas Hospital, Mumbai (Maharashtra) (hereinafter referred to as GEPIL (Haryana) which expression shall unless repugnant to the context or meaning thereof shall mean and include its successors, representatives and permitted assignees etc.) of the FIRST PART

M/s. Crystal Crop Protection Ltd. AND which is a Company / Partnership Firm / Proprietary Concern duly incorporated under the provisions of HARYANA located at VPO-NATHUPUR, DIST-SONIPAT, and having its registered office at HARYANA (hereinafter referred to as The Client which expression shall unless repugnant to the context or meaning thereof shall mean and include its successors, representatives and permitted assignees etc.) of the SECOND PART.

Recitals

WHEREAS Haryana Environmental Management Society (HEMS), a society registered under the Societies Registration Act, 1860 having its registered office at SCO 45, 1st floor, Sector -31, HUDA Market, Gurgaon, Haryana acting as a nodal agency of the Government of Haryana has awarded the work to a Consortium of Members led by Gujarat Enviro Protection & Infrastructure Ltd. (GEPIL) for development and operation of a Hazardous Waste Management Facility (HWM Facility) at Village Pali, Near Pali-Mohabatabad Slope Crusher Zone, Faridabad, Haryana on the leasehold land as per Lease Agreement executed between HEMS and Municipal Corporation, Faridabad (MCF) on 19th April 2005.

For Gujarat Enviro Protection And Infrastructure (Haryana) Pvt. Ltd.

For Crystal Crop. Protection Ltd.

Directed/Authorized Signatory

Authorized Signatory

SIGNED for & on behalf of GEPIL (Haryana)

SIGNED for & on behalf of Client

AND WHEREAS the Companies of Members led by GEPIH, have formed a Special Purpose Vehicle ("SPV") called Crystal Crop Protection & Infrastructure (Haryana) Pvt. Ltd. (GEPIH (Haryana)) to develop, operate and maintain the said Hazardous Waste Management Facility at Village Pali, Near Pali Mohabatabad Stone Crusher Zone, Faridabad, Haryana through an Agreement executed between HEMS, GEPIH (Haryana) and GEPIH, Surat on 30th June 2008.

AND WHEREAS the Party of the First Part is inter alia engaged in the business activities of development, operations and maintenance of infrastructure projects for hazardous waste management as specified in Hazardous Waste (Management and Handling) Rules, 1989 as amended in 2000, 2003, 2008 and now Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2016 and subsequent amendments (hereinafter referred to as "The Rules") and has been given authorization by Haryana State Pollution Control Board (HSPCB) to set up an Integrated Common Hazardous Waste Treatment, Storage & Disposal Facility (TSDF) at Pali, Near Pali Mohabatabad Stone Crusher Zone, Faridabad, Haryana.

AND WHEREAS the Party of the Second Part is generating hazardous waste and has approached the Party of the First Part for managing and disposing off its Hazardous Waste as per applicable rules since the Party of the First Part has set up the said facility at Pali, Near Pali Mohabatabad Stone Crusher Zone, Faridabad, Haryana.

AND WHEREAS the Party of the First Part has agreed to accept Hazardous Waste generated by the Party of the Second Part for collection, transportation, storage, treatment and disposal on the mutually agreed terms and conditions stated hereunder.

THIS DEED THEREFORE WITNESSES AS FOLLOWS:

1. DEFINITIONS AND INTERPRETATIONS

- 1.1 "TIME" shall be stated in Hours and shall mean Indian Standard Time.
- 1.2 "DAY" means a period of twelve (12) consecutive hours beginning at 08.00 hours and ending at 20.00 hours.
- 1.3 "WEEK" means a period of seven (7) consecutive days beginning from a day.
- 1.4 "MONTH" means a period beginning at 08.00 hours on the first day of Calendar Month and ending at 08.00 hours on the first day of succeeding Calendar Month.
- 1.5 "YEAR" means a period of three hundred and sixty five (365) consecutive days or three hundred and sixty six (366) consecutive days when such period includes a twenty ninth (29th) day of February beginning at 08.00 hours from a day.
- 1.6 "FINANCIAL YEAR" means a period of three hundred and sixty five (365) consecutive days or three hundred and sixty six (366) consecutive days when such period includes a twenty ninth (29th) day of February beginning at 08.00 hours from a day. It starts from 1st day of April month of the year and ends on 31st day of March month of next year.
- 1.7 "ACTIVE TERM" means the term during which GEPIH (Haryana) shall receive, transport, store, treat, recycle, recover and dispose of the hazardous waste at the TSDF site as per authorization granted by the HSPCB.

For Crystal Crop. Protection Ltd.

Crystal Crop Protection Ltd.
Infrastructure (Haryana) Pvt. Ltd.
SIGNED for & on behalf of GEPIH (Haryana)

Authorized Signatory
SIGNED for & on behalf of Client

"FORCE MAJEURE" means any event or circumstance or combination of events or circumstances beyond the reasonable control of either party (the "Affected Party") and such event or circumstance cannot by exercise of reasonable diligence be prevented or cause to be prevented; cannot, despite the adoption of reasonable precautions or alternative measures (where sufficient time to adopt such precautions or alternative measures before the occurrence of such event or circumstance is available) be prevented; and which materially and adversely affects such party's performance of its duties and obligations under this Agreement.

- 1.9 The headings of or title to the Clauses in this Agreement shall not be deemed to be a part thereof or be taken into consideration in the interpretation or construction thereof.
- 1.10 Words imparting the singular only also include the plural and vice versa where the context so requires.
- 1.11 "TSDF" means Treatment, Storage & Disposal Facility operated by GEPIL (Haryana) located at Village Pali, Near Pali Mohabatabad Stone Crusher Zone, Faridabad, Haryana
- 1.12 HSPCB means Haryana State Pollution Control Board, CPCB means Central Pollution Control Board and MoEF means Ministry of Environment and Forests.
- 1.13 "Client" means a Company / Partnership Firm / Proprietary Concern / Co-operative Society, AOP etc which generates hazardous wastes as defined in the Hazardous Waste (Management & Handling Rules) 1989 as amended in 2000, 2003, 2008 and now Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2016 and subsequent amendments.

2. PERIOD OF AGREEMENT

- 2.1 The present Agreement shall remain in force for the Active Term or five years from 09th Oct. 2019 unless terminated earlier due to any of the reasons mentioned in this Agreement.
- 2.2 GEPIL (Haryana) will issue a Registration Certificate valid for 5 years effective from 09th Oct. 2019. The registration shall need to be renewed including execution of fresh Agreement by the Client at least three months before the expiry of the current Agreement.

3. TERMINATION OF AGREEMENT

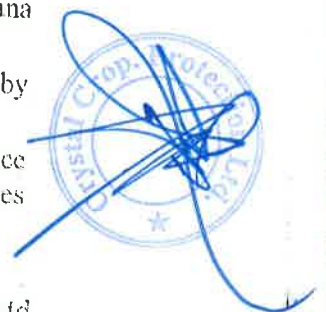
- 3.1 Both the Parties hereto agree that the present Agreement shall automatically come to an end in any of the following eventualities:
- On expiry of Authorization granted to the Client and the same having not been renewed by the Client or of the same having not been granted by Haryana State Pollution Control Board (HSPCB).
 - On expiry of HEMS membership and the same having not been renewed by the Client or of the same having not been granted by HEMS.
- 3.2 This AGREEMENT can be terminated by the Client after giving a written Notice of at least 30 days to the other party. The provision relating to minimum charges shall be applicable, during the notice period in accordance with Clause 10.2.

For Gujarat Enviro Protection And
Infrastructure (Haryana) Pvt. Ltd.

SIGNED for & on Behalf of GEPIL (Haryana)

For Crystal Crop. Protection Ltd.

SIGNED for & on behalf of Client
Authorized Signatory



- 3.3 Both the Parties hereto, hereby agree that in case of the present Agreement coming to an end owing to any of the aforesaid eventualities, it will be the sole responsibility of the Client to handle, treat and dispose off its Hazardous Waste in accordance with the relevant provisions of law.

4. REGISTRATION

- 4.1 The Client shall pay non refundable charges of ₹ 1000=00 (Rupees One Thousand Only) towards Registration every five years.
- 4.2 The Client shall pay non refundable charges of ₹ 8000=00 (Rupees Eight Thousand Only) towards Finger Printing Analysis of the waste to be conducted by GEPIL (Haryana) for waste characterization.
- 4.3 After having registered, if the registration is terminated within the validity period of the present Agreement because of any reason stated in this Agreement, then in that event, the registration can be revived on payment of non-refundable re-registration charges of ₹ 500/- (Rupees Five hundred only). Such re-registration shall be valid till the expiry of the last Registration Certificate.
- 4.4 The registration under this Agreement is not transferable in any manner whatsoever.

5. TREATMENT & DISPOSAL CHARGES

- 5.1 The Treatment and Disposal charges for various types of hazardous wastes are mentioned in Schedule I to this Agreement. The Treatment & Disposal Charges applicable under this Agreement for different types of wastes generated by the Client are as follows:

Sr. No.	Type of Wastes	Treatment and Disposal Charges (₹ Per MT)
1	Cont. Cotton Waste	12,910 =00
2	Cont. Plastic Waste	12,910 =00
3	STP Sludge	1,613 =00
4	Incineration Ash	1,613 =00
5	MEE Sludge	1,613 =00
6	Process Sludge	1,613 =00
7	Cooling Tower Fine	15,421=00
8	Solvent Residue	15,421=00
9		

(Attach sheets in case of more types of wastes)

- 5.2 GEPIL (Haryana) shall charge the Client towards treatment & disposal on the basis of weighment to be done at the TSDF site. If the Weigh Bridge at the site is not working, it will be weighed at an outside Weigh Bridge approved by GEPIL (Haryana).
- 5.3 The rates specified in Schedule I to this Agreement are based on general characteristics of the specified type of waste. In case any waste of the Client that

For Gujarat Enviro Protection And
Infrastructure (Haryana) Pvt. Ltd.

SIGNED for & on Behalf of GEPIL (Haryana)

For Crystal Crop. Protection Ltd.

SIGNED for & on behalf of Client

the Client shall be responsible for the cost of transportation of waste from the location of the Client to the TSDF Site. The Client shall be responsible for the cost of transportation of waste from the location of the Client to the TSDF Site. The Client shall be responsible for the cost of transportation of waste from the location of the Client to the TSDF Site.

6. TRANSPORTATION CHARGES

- 6.1 The Client has requested GEPIL (Haryana) to provide NIL numbers of storage containers of NA capacity each to avoid frequent transportation. GEPIL (Haryana) has agreed to provide the said containers in consideration of which the client has agreed to pay ₹. NA (Rupees NA) as interest free security deposit to GEPIL (Haryana). The Client shall be responsible for the security and upkeep of as well as any damage caused to the container while it is lying at the premises of the Client.
- 6.2 M/s. GEPIL (Haryana) shall provide the fleet of waste transport vehicles of different capacities duly authorized by HSPCB. As per the requirements of the Client, lowest capacity vehicle for transporting its Hazardous Waste on full vehicle load basis to the TSDF Site shall be sent by GEPIL (Haryana) at the cost of the Client.
- 6.3 The Transportation Charges for transportation of waste from location of Client to the TSDF site are mentioned in Schedule II to this Agreement.
- 6.4 The Transportation Charges applicable under this Agreement at the current rates, excluding taxes, are ₹. (AS PER SCHEDULE -2) per km per MT Taxes, as applicable, are payable extra.

7. REVISION OF CHARGES

- 7.1 The Client covenants that various notified charges like Treatment & Disposal Charges, Transportation Charges etc and any other unforeseen charges under this Agreement for its Hazardous Waste shall be subject to revision and inclusion during the currency of this Agreement in consultation with HEMS, as and when such revision is called for due to any reason whatsoever. GEPIL (Haryana) shall inform the Client about such revisions in advance through a separate letter.
- 7.2 All Government, municipal, panchayat taxes, duties, levies, octroi, tolls, service tax etc., as applicable from time to time, related to transportation, treatment, storage, disposal and other services rendered under this Agreement shall be borne by the Client. In case the same are paid by GEPIL (Haryana), the Client shall reimburse the amount thereof to GEPIL (Haryana).
- 7.3 Service Tax or any other existing taxes as applicable presently on services related to disposal of hazardous waste have to be paid by the client.

8. OBLIGATIONS OF THE CLIENT

- 8.1 While entering into the present Agreement with GEPIL (Haryana), the Client shall submit the categories of Hazardous Waste along with the quantity and its desire to dispose off the same by GEPIL (Haryana). The said categories of Hazardous Waste shall be as per the parameters specified in the Schedules of Hazardous Waste (Management, Handling & Transboundary Movement) Rules 2016, as amended from time to time.

For Gujarat Enviro Protection And
Infrastructure (Haryana) Pvt. Ltd.

Authorized Signatory

SIGNED for & on Behalf of GEPIL (Haryana)

For Crystal Crop. Protection Ltd.

SIGNED for & on Behalf of Client/ory

8.2 The Client shall get the authorization from HSPCB permitting the Client to send its Hazardous Waste to the TSDF Site for treatment and disposal and that it shall be the responsibility of the Client to get the same renewed from time to time, failing which GEPIL (Haryana) reserves its right to repudiate the present Agreement under intimation to HSPCB and HEMS.

8.3 The Client shall make all the proper, necessary and adequate arrangement for keeping production records and the Hazardous Waste generated from these processes. The Client shall provide relevant and correct information with respect to process, waste quantity and characteristics (physical & chemical), nature and toxicity of waste as and when asked for by GEPIL (Haryana). This information may be forwarded to HSPCB / CPCB / MoEF/ any other Statutory Authority, if asked for.

8.4 The Client shall be required to maintain the record of Hazardous Wastes generated, stored and sent for treatment and disposal to GEPIL (Haryana). The records so maintained shall be subject to cross check and physical verification by authorized representative of GEPIL (Haryana) through visit to Client's premises.

8.5 GEPIL (Haryana) reserves right to reject collection of the hazardous waste spilled over the ground and containers whose exteriors are soiled by spillages. The Client shall locate the storage facility in such a way so that the same shall be accessible to the waste transport vehicles of GEPIL (Haryana).

8.6 **Dispatch and Detention of Transport Vehicle**

- i. The Client is required to intimate GEPIL (Haryana) when it has minimum one vehicle load of waste to be lifted, through letter / Fax / Email to send waste transport vehicle at least five days in advance from the date of collection.
- ii. On arrival of the same at the Client's site, the Client shall be responsible for loading its Hazardous Waste into the said waste transport vehicle within three hours of arrival at the Client's site counting from the time of reporting at the security gate of the Client.
- iii. If the detention of the said waste transport vehicle at the Client's site exceeds the time limits stipulated in Schedule II to this Agreement, there shall be levied detention charges at the rates as mentioned in Schedule II to this Agreement. The Client may detain the vehicle for a maximum of six hours including time stipulated for loading.
- iv. In case, for any reason, including detention for more than six hours, the vehicle is sent back to GEPIL (Haryana) without giving the waste even after having been requisitioned by the Client, the Client shall pay the transportation charges for the full capacity load of the vehicle.

8.7 Before the Hazardous Waste is loaded into the waste transport vehicle and dispatched to TSDF site, the Client shall ensure that the said waste is packed in a manner suitable for transportation and that the said packed waste withstands physical and climatic conditions and does not result in any kind of leakage, spillage and accident etc causing adverse impact on health and environment.

For Gujarat Enviro Protection And
Infrastructure (Haryana) Pvt Ltd.

Authorized Signatory
SIGNED for & on Behalf of GEPIL (Haryana)

For Crystal Crop. Protection Ltd.

Authorized Signatory
SIGNED for & on behalf of Client

8.8 If and when an accident occurs while loading Hazardous Waste at the Client's site, the Client shall immediately report the same to HSPCB and other authorities as per the Rules and also to GEPIL (Haryana).

8.9 Rejection of Waste

- i. The Client agrees to maintain waste characteristics close to Finger Print Analysis Report of the waste (attached as Schedule III to this Agreement). In case of variation of over 5% in waste characteristics mentioned in the said Schedule, the Client covenants to pay the revised treatment and disposal charges determined for its specific waste type and characteristics failing which the Client shall accept the hazardous waste back at its own cost in accordance with Clause 8.9 (ii) and 8.9 (iii).
 - ii. The Client shall be required to accept Hazardous Waste back and bear the cost of return transportation of full vehicle load, if the same is rejected by GEPIL (Haryana) due to any of the following reasons:
 - a) The variation in waste characteristics is beyond 5%.
 - b) The wastes contain unacceptable waste types as listed under Clause 9.2.
 - iii. If the Client fails to do so within 2 days of reporting the matter, its registration will be terminated with intimation to HEMS. In the event of waste rejection, the Client shall be totally responsible and liable for any consequence arising thereof and GEPIL (Haryana) reserves all rights to take any suitable actions under the law.
- 8.10 During wet period of monsoon season, Hazardous Waste may not be accepted at the TSDF Site. During this period Client is required to make a provision to store its Hazardous Waste for a minimum period of four months, as per the requirement of HSPCB.
- 8.11 GEPIL (Haryana) may request the Client, under intimation to HEMS, to provide any additional information, as may be required, for treatment and disposal of waste or as asked for by HSPCB / CPCB / MOEF / any other Statutory Authority. The Client shall send the said information to GEPIL (Haryana) at least two days before the scheduled time, if specified by the information seeking authority else within two weeks time.
- 8.12 The Client shall comply with the provisions of Environment (Protection) Act, 1986 and the Rules as amended from time to time as also with the conditions of the present Agreement and that any breach committed thereof shall render the Client not eligible for disposing of its Hazardous Waste in TSDF site.
- 8.13 The Client shall not claim any right, interest or privilege in or in relation / connection with Hazardous Waste accepted at the TSDF site.
- 8.14 In case of any change in constitution of firm or company or proprietary concern, company name, products or quality and/or production rate of products or waste quantity or characteristics, the Client shall intimate GEPIL (Haryana) by written notification by registered letter / speed post / courier prior to proposed date of change and get its waste Finger Printing Analysis done again, where ever required, in accordance with Clause 4.2.

For Gujarat Enviro Protection And
Infrastructure (Haryana) Pvt. Ltd.

SIGNED for & on Behalf of GEPIL (Haryana)

For Crystal Crop. Protection Ltd,

SIGNED for & on behalf of Client

9. QUALITY

- 9.1 The Client hereby covenants to ensure that its Hazardous Waste shall, under all circumstances, conform to the norms specified by HSPCB and as prescribed under the provisions of law for the time being in force.
- 9.2 The Client agrees not to send the following type of wastes which could be detrimental to the environment, safety of the facility and to the persons handling it in any manner:-
- Wastes containing explosive substances (An explosive substance is a solid or liquid substance (or mixture of substances) which is, in itself, capable by chemical reaction of producing gas at such a temperature and pressure and at such a speed as to cause damage to the surroundings.)
 - Waste which has an obnoxious odour.
 - Waste which is flammable (Flash point below 65°C)
 - Waste which contains shock sensitive substances (Shock sensitive refers to the susceptibility of a chemical or substance to rapidly decompose or explode when struck, vibrated or otherwise agitated.).
 - Waste which contains volatile substance of significant toxicity.
 - Wastes containing Radio active substances

10. QUANTITY

- 10.1 Subject to the conditions mentioned under Clause 3.2, the Client agrees to send on firm basis to GEPIL (Haryana), its own Hazardous Waste subject to maximum of _____ MT per day and 24.50 MT per annum, which will be called the Contracted Quantity.
- 10.2 If the Client wants to send the requisite Hazardous Waste less than 90% of the aforesaid Contracted Quantity, than in that event, the Client can request GEPIL (Haryana), along with necessary justifications, for change in its Contracted Quantity twice in a year by providing at-least three months notice. The client shall still be liable to pay to GEPIL (Haryana) for the Minimum Quantity i.e. 90% of the Contracted Quantity till the expiry of three months notice period. The receipt of waste shall be monitored by GEPIL (Haryana) on quarterly basis and charges for deficit, if any shall be billed accordingly. In case of Force Majeure conditions at the Client's premises leading to reduction in annual waste generation, the liability to pay for minimum quantity shall be waived for the period of Force Majeure.
- 10.3 If the Client exceeds the annual Contracted Quantity of Hazardous Waste for disposal, then in that event Client covenants to increase the security deposit accordingly as per Clause No. 11.1.

11. BILLING AND PAYMENT OF CHARGES

- 11.1 The Client shall effect arrangement to make the payment of interest free Security Deposit of ₹ 154811/- (Rupees One lakh Fifty Four Thousand Eight Hundred Eleven Only)

For Gujarat Enviro Protection And
Infrastructure (Haryana) Pvt. Ltd.

For Crystal Crop, Protection Ltd.

SIGNED for & on Behalf of GEPIL (Haryana)

SIGNED for & on behalf of Client

Charges of its Hazardous Waste for two months of Contracted Quantity that shall always be maintained at a value twice or more than the Transportation, Treatment & Disposal Charges for one vehicle load waste. The said amount of interest free Security Deposit will be refunded only on the termination of this Agreement after adjusting other / pending claims of GEPIL (Haryana) against the Client, if any.

- 11.2 In case of insufficient balance (Security Deposit) in the Client's account, GEPIL (Haryana) shall not send the waste collection vehicle.
- 11.3 GEPIL (Haryana) shall raise the bill against each waste disposal consignment (towards Transportation, Treatment & Disposal Charges) within three days of receipt of the waste at the TSDP Site. The client shall pay the bill within 30 days from the date of issue of bill.
- 11.4 The Client shall, upon receipt of the bill from GEPIL (Haryana), make full payment on or before the due date mentioned in the bill. In case of delayed payment by the Client, interest at the rate of 15% per annum shall be charged by GEPIL (Haryana) on delayed payments.
- 11.5 In case of default / dishonor in payment, GEPIL (Haryana) shall give seven days notice to Client, with information to HEMS, for settlement of outstanding dues by effecting the payment through DD/pay order along with interest else the Registration of Client shall be cancelled.
- 11.6 In the event of cancellation of Registration due to reasons mentioned under Clause 11.5, the client can re-register upon payment of balance dues along with interest through DD / Pay order apart from non-refundable re-registration charges in accordance with Clause 4.3.

12. **DEFAULT**

- 12.1 If the Client fails and /or defaults in the discharge of any of his obligation under the present Agreement, the GEPIL (Haryana) after serving seven days notice shall have discretion to (i) cancel the Client's Registration & refuse to accept Hazardous Waste of the Client for disposal, and (ii) notify to HEMS and HSPCB the name of the Client informing about such default.
- 12.2 In the event of Client committing any breach/violation of any condition of the present Agreement or any provision of Law / Act / Rules for the time being in force, GEPIL (Haryana) reserves its right to suspend / cancel the registration for such period as it deems fit with information to HEMS.
- 12.3 Where an offence under the Environment (Protection) Act 1986 or under the Rules framed thereunder, has been committed by the Client or is attributed to any negligence on the part of the Client which shall include its Director, Partner, Proprietor, Manager, Secretary, Officer etc. and if such Client is guilty of the offence or is liable to be prosecuted against and punished accordingly, no suit, prosecution or legal proceeding (s) shall lie against GEPIL (Haryana) for the offence committed by the Client.
- 12.4 GEPIL (Haryana) reserves its right to issue a show cause notice to the Client, with information to HEMS, if it is of the opinion that the Client has contravened the provisions of the present Agreement, requesting the Client to remedy the

For Gujarat Enviro Protection And
Infrastructure (Haryana) Pvt. Ltd.

SIGNED for & on Behalf of GEPIL (Haryana)

For Crystal Crop. Protection Ltd.

SIGNED for & on Behalf of Client

15. PREVIOUS CORRESPONDANCE

- 15.1 Save and except all discussions and meetings held and correspondence exchanged between GEPIL (Haryana) and the Client in respect of this Agreement and any decisions arrived at therein in the past and before coming into force of the present Agreement, no reference of such discussions with the Client for interpreting the present Agreement or otherwise shall be made. Whereas, Waste Data Sheet and Application Form, will be treated as part of this Agreement.

16. ARBITRATION

- 16.1 In case of any dispute or difference of opinion that may arise out of the present Agreement, the matter shall be settled by the parties by mutual negotiations to be concluded within 45 days from the date of intimation of existence of dispute or difference of opinion, as the case may be, by one party to the other party, failing which, the matter shall be settled through arbitration. Both the parties shall appoint an arbitrator each, and the two arbitrators so appointed, shall appoint the third arbitrator. The third arbitrator shall be the presiding arbitrator of the panel. The arbitration shall be as per the Arbitration & Conciliation Act, 1996. The venue of arbitration shall be Faridabad. The arbitration proceedings shall be recorded in English and the arbitration award shall be final and binding on both the parties.

17. LAWS GOVERNING THE AGREEMENT

- 17.1 The present Agreement shall be subject to Indian Laws, rules and regulations and notifications etc. issued under such laws.

18. AMENDMENTS:

- 18.1 GEPIL (Haryana) may, if required at any point of time make suitable change in the present Agreement in consultation with HEMS after serving a notice to the said Client.

For Gujarat Enviro Protection And
Infrastructure (Haryana) Pvt. Ltd.

Director/Authorised Signatory

SIGNED for & on Behalf of GEPIL (Haryana)

For Crystal Crop. Protection Ltd.

Authorized Signatory

SIGNED for & on behalf of Client

19. JURISDICTION

19.1 Subject to the provisions of Clause 17 of this Agreement, the parties hereto mutually agree that the Civil Courts at Faridabad only shall have jurisdiction for all the disputes/differences arising out of this Agreement.

20. The addresses of the parties hereto, unless changed by written notification to be given at least 15 days in advance by registered letter prior to proposed date of change, shall be as follows :

- 1) M/s. Gujarat Enviro Protection & Infrastructure (Haryana) Pvt. Ltd.
Reg. Office: 370, S V P Road, Shop 8, Plot 384,
Cigaretwala Bldg. Opp. CBI Prathna Samaj, Nr.
Harkishandas Hospital, Mumbai (Maharashtra)

2)



IN WITNESS WHEREOF the parties hereto acting through their properly constituted representatives have set their hands to cause this Agreement signed and executed in their respective names and on their behalf.

For and on behalf of
GEPI (Haryana)
For Gujarat Enviro Protection And
Infrastructure (Haryana) Pvt. Ltd.

For CRYSTAL CROP PROTECTION LTD.

~~For Crystal Crop Protection Ltd.~~

Name : Mr. Ashwani Kumar
Designation : Business Head
Address :

..... Mohit Kumar Groel .
Name :
Designation : Director
Address : Nathupur, Distt
Sonapat

Witness

Witness:

1.....
Name : Love Gaudh
Designation : Manager
Address : GEPI

1.....
Name :
Designation :
Address :

2.....
Name :
Designation :
Address :

2.....
Name :
Designation :
Address :

For Gujarat Enviro Protection And
Infrastructure (Haryana) Pvt. Ltd.

For Crystal Crop Protection Ltd

Director/Authorised Signatory

SIGNED for & on Behalf of GEPI (Haryana)

SIGNED for & on behalf of Client



Schedule - I

Rates for Landfill, Solidification & Stabilisation and Incineration (Effective From 01/04/2019)				
	Up to 400 MT	401 To 700 MT	701 To 1200 MT	Above 1200 MT
a. Fixed Landfill Charges (Rs. Per MT)	1613	1595	1576	1565
b. Solidification & Stabilisation Charges (Rs per MT)				
Waste : Additives				
1:0.10	2319	2130	2112	2087
1:0.20	3031	2970	2940	2909
1:0.30	3590	3522	3487	3451
1:0.40	4010	3931	3888	3851
1:0.50	4430	4344	4302	4253
1:0.60	4977	4880	4832	4777
1:0.70	5523	5408	5354	5300
1:0.80	6011	5890	5829	5768
1:0.90	6443	6316	6248	6188
1:1.00	6874	6736	6668	6596
c. Variable Incineration Charges (Rs. Per MT) - for a category of waste of a particular calorific value (in KCal/Kg) as per the ranges given below :				
Calorific value				
Upto 2500 KCal/kg	18767	18207	18020	17642
Greater than 2500 & up to 4500 KCal/kg	15421	14959	14809	14498
Greater than 4500 KCal/kg	12910	12514	12386	12137

Notes:-

1. The above rates are valid up to 31.03.2020. Thereafter the rates shall attract escalation @ 4% on annual basis.
2. The above rates are for the specified type of waste. In case any waste that may require special treatment prior to its disposal, the rates for such waste shall be fixed on case to case basis depending on the characteristics of waste & treatment required in consultation with HEMS
3. The rates for solidification and stabilization are for the waste that requires additives up to 1:1.0 ratios. If the waste requires additives more than 1:1, the rates shall be charged depending on the quantity of additives required to be added & its bulking factor to be decided in consultation with HEMS.
4. The rates of Solidification & Stabilization as well as rates for incineration include landfill charges. No extra charges will be levied for residue disposal landfill.
5. The above rates are exclusive of any statutory levies which will be payable extra.
6. Process for printing of manifest @ Rs. 10/- for each.
7. Further, the charges in respect of preprocessing process where ever applicable, remains unchanged and are as under:
 - a) Charges for de-watering/ drying @ Rs. 1000/- MT on Hazardous waste having moisture content more than 40%.
 - b) Charges for neutralization @ Rs. 1000/- MT on Hazardous waste having pH between 4 and 2.
 - c) We will also be charging neutralization @ Rs. 2000/- MT on Hazardous waste having pH lesser than 2.

SIGNED for & on behalf of CEPI (Haryana)

Director/Authorized Signatory

SIGNED for & on behalf of Client

For Crystal Crop. Protection

Authorized Signatory



**Schedule- II Transportation
Charges (Rs. per Km per MT)**

Revised Rates effective from 01-10-2019 (Fuel Price: 65.37 per liter)

One Way	1 MT			3 MT			9 MT			10 MT			16 MT & Above		
	Fuel Cost	Other Cost	Total Cost	Fuel Cost	Other Cost	Total Cost	Fuel Cost	Other Cost	Total Cost	Fuel Cost	Other Cost	Total Cost	Fuel Cost	Other Cost	Total Cost
Distance															
Upto 75 KM	6.54	19.3	25.84	4.43	6.26	10.69	3.42	2.15	5.57	3.80	2.39	6.19	3.31	1.97	5.28
75 to 200 KM	6.54	13.51	20.05	3.8	4.52	8.32	3.00	1.45	4.45	3.34	1.61	4.95	2.9	1.27	4.17
>200 KM	6.54	12.72	19.26	3.8	3.88	7.68	3.00	1.15	4.15	3.34	1.27	4.61	2.9	1.05	3.95

Note:-

1. The above revised rates are based on current (revised) Diesel price of Rs. 65.37 per liter. The 'Fuel Cost' component of the rates shall be adjusted based on the rates of Diesel at Faridabad (Haryana) on quarterly basis i.e. 1st of April, July, Oct. & Jan. of each year.
2. The 'Other Cost' component of rates is firm up to 31.03.2020 and shall be subject to 3% escalation on annual basis thereafter.
3. The rates indicated above are for actual Distance of the Generator's unit from the TSDF site. The chargeable distance will be double the actual one way distance from TSDF site to the Generator's unit i.e. to & fro for full truck load. Minimum charges payable will be Truck Capacity in MT *Rate per km/MT*To & fro distance of Generator's unit from TSDF Site.
4. The transportation rates are excluding loading, packing material, toll tax and any other statutory levies.
5. The maximum loading time and detention charges beyond the free loading time for different capacity vehicles are as given below:

Sr. No.	Vehicle Capacity	Free Loading Time	Detention Charges/hr
(i)	1 Ton	2 hrs	300/-
(ii)	3 Tonnes	2 hrs	300/-
(iii)	9 Tonnes	3 hrs	360/-
(iv)	16 Tonnes	4 hrs	400/-

SIGNED for & on Behalf of CEPIL (Haryana)

Infrastructure (Haryana) Pvt. Ltd.

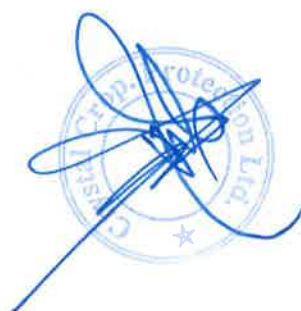
Director/Authorised Signatory

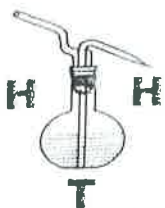
SIGNED for & on Behalf of Client

For Crystal Crop. Protection

Authorized Signatory

*Annexure-10 Copy of Recent Reports of Tests conducted by
MoEF&CC Approved Lab
December 2022 Compliance Report*





DOC No. HTH/QF/7.8

HARYANA TEST HOUSE

& Consultancy Services

GOVT. RECOGNISED LABORATORY

50-C, Sector-25 Part-II, HUDA, PANIPAT-132 103 (HR.)

Contact : (Off.) 86077-70160, 0180-3510205 (Env.) 86077-70164, (BM) 86077-70166, (Food) 86077-70169
Web Site : www.haryanatesthouse.net, e-mail : haryanatesthousecs@gmail.com, info@haryanatesthouse.net



TC-7811



Recognition / Approval : MoEF / FSSAI / BIS / ISO 9001, 14001, 45001 Certified Lab.

TEST REPORT

Issued To: Crystal Crop. Protection Ltd., (Unit- Technical Plant) Village & PO Nathupur, Sonapat (HR)	Report No. : HTH/EP/220806023 ULR No. : TC781122100004567F Party's Ref No. : Nil Booking Date : 06/08/2022 Period of Testing : 06/08/2022 To 13/08/2022 Reporting Date : 13/08/2022
---	--

Sample Description : Indoor Air Quality

Type of Industry : Pesticide manufacturing
Date & time of sampling : 04/08/2022 (09:30 Hrs to 17:30 Hrs)
Sample Location : Ground Floor
Instrument used : Handy Sampler APM 821 (Sr. No. 835 DTB 2016)
Instrument Calibration Status : Calibrated (upto 06.07.2023)
Purpose of analysis : Monitoring
Sample collected/ supplied by : By our Lab. Representative

A. Observations:

1. Sampling flow rate (Avg.) : 1.90 LPM
2. Total volume of air sampled : 0.912 m3
3. Period of sampling : 8 Hrs

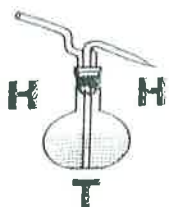
S.N.	Test Parameters	Unit	Result	Requirement as per OSHA	Test Method
Discipline: Chemical, Group: Atmospheric Pollution					
1	Total Aerosols Mass	mg/m3	1.009	15 Max	NIOSH 500 : 1994
2	Sulphur Dioxide (SO2)	mg/m3	0.022	13 Max	ASTMD-2914 : 2015
3	Nitrogen Dioxide (NO2)	mg/m3	0.037	9.0 Max	NIOSH 6014 : 1994
4	Ammonia (NH3)	mg/m3	0.045	35 Max	NIOSH 6015 : 1994
5	Carbon Monoxide (CO)	mg/m3	0.229	55 Max	NIOSH 6604 : 1996
6	Acid Mist (volatile acids) as HCl	mg/m3	1.819		NIOSH 7907 : 2014

End of Report

Remarks : Limits for Air Contaminants as per OSHA

BLQ : Below limit of Quantification / LOQ : Limit of Quantification

Md. Asfak Anqari
Sr. Manager (Env.)



DOC No HTH/OF/7.8

HARYANA TEST HOUSE

& Consultancy Services

GOVT. RECOGNISED LABORATORY

50-C, Sector-25 Part-II, HUDA, PANIPAT-132 103 (HR.)

Contact : (Off.) 86077-70160, 0180-3510205 (Env.) 86077-70164, (BM) 86077-70166, (Food) 86077-70169
Web Site : www.haryanatesthouse.net, e-mail : haryanatesthousees@gmail.com, info@haryanatesthouse.net



Recognition / Approval : MoEF / FSSAI / BIS / ISO 9001, 14001, 45001 Certified Lab.

TEST REPORT

Issued To: Crystal Crop. Protection Ltd., (Unit- Technical Plant) Village & PO Nathupur, Sonapat (HR)	Report No. : HTH/EP/220806024 ULR No. : TC781122100004568F Party's Ref No. : Nil Booking Date : 06/08/2022 Period of Testing : 06/08/2022 To 13/08/2022 Reporting Date : 13/08/2022
---	--

Sample Description : Indoor Air Quality

Type of Industry	: Pesticide manufacturing
Date & time of sampling	: 04/08/2022 (09:45 Hrs to 17:45 Hrs)
Sample Location	: 1st Floor
Instrument used	: Handy Sampler APM 821 (Sr. No. 801 DTL 2016)
Instrument Calibration Status	: Calibrated (upto 06.07.2023)
Purpose of analysis	: Monitoring
Sample collected/ supplied by	: By our Lab. Representative

A. Observations:

1. Sampling flow rate (Avg.)	: 1.90 LPM
2. Total volume of air sampled	: 0.912 m3
3. Period of sampling	: 8 Hrs

S.N.	Test Parameters	Unit	Result	Requirement as per OSHA	Test Method
Discipline: Chemical, Group: Atmospheric Pollution					
1	Total Aerosols Mass	mg/m3	1.086	15 Max	NIOSH 500 : 1994
2	Sulphur Dioxide (SO2)	mg/m3	0.024	13 Max	ASTMD-2914 : 2015
3	Nitrogen Dioxide (NO2)	mg/m3	0.040	9.0 Max	NIOSH 6014 : 1994
4	Ammonia (NH3)	mg/m3	0.047	35 Max	NIOSH 6015 : 1994
5	Carbon Monoxide (CO)	mg/m3	0.344	55 Max	NIOSH 6604 : 1996
6	Acid Mist (volatile acids) as HCl	mg/m3	3.624	-	NIOSH 7907 : 2014

End of Report

Remarks : Limits for Air Contaminants as per OSHA

BLQ : Below limit of Quantification / LOQ : Limit of Quantification



Sr. Manager (Env.)

Page No.: 1 of 1



DOC No. HTH/OF/7.8

HARYANA TEST HOUSE

& Consultancy Services

GOVT. RECOGNISED LABORATORY

50-C, Sector-25 Part-II, HUDA, PANIPAT-132 103 (HR.)

Contact : (Off.) 86077-70160, 0180-3510205 (Env.) 86077-70164, (BM) 86077-70166, (Food) 86077-70169
Web Site : www.haryanatesthouse.net, e-mail : haryanatesthousecsa@gmail.com, info@haryanatesthouse.net

TC-7811



Recognition / Approval : MoEF / FSSAI / BIS / ISO 9001, 14001, 45001 Certified Lab.

TEST REPORT

Issued To: Crystal Crop. Protection Ltd., (Unit- Technical Plant) Village & PO Nathupur, Sonapat (HR)	Report No. : HTH/EP/220806025 ULR No. : TC781122100004569F Party's Ref No. : Nil Booking Date : 06/08/2022 Period of Testing : 06/08/2022 To 13/08/2022 Reporting Date : 13/08/2022
Sample Description : Indoor Air Quality	

Type of Industry : Pesticide manufacturing
Date & time of sampling : 04/08/2022 (10:00 Hrs to 18:00 Hrs)
Sample Location : HCL Storage Area
Instrument used : Handy Sampler APM 821 (Sr. No. 838 DTB 2017)
Instrument Calibration Status : Calibrated (upto 06.07.2023)
Purpose of analysis : Monitoring
Sample collected/ supplied by : By our Lab. Representative

A. Observations:

1. Sampling flow rate (Avg.) : 1.80 LPM
2. Total volume of air sampled : 0.864 m³
3. Period of sampling : 8 Hrs

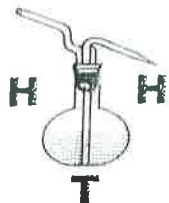
S.N.	Test Parameters	Unit	Result	Requirement as per OSHA	Test Method
Discipline: Chemical, Group: Atmospheric Pollution					
1	Total Aerosols Mass	mg/m ³	1.042	15 Max	NIOSH 500 : 1994
2	Sulphur Dioxide (SO ₂)	mg/m ³	0.026	13 Max	ASTMD-2914 : 2015
3	Nitrogen Dioxide (NO ₂)	mg/m ³	0.041	9.0 Max	NIOSH 6014 : 1994
4	Ammonia (NH ₃)	mg/m ³	0.048	35 Max	NIOSH 6015 : 1994
5	Carbon Monoxide (CO)	mg/m ³	0.573	55 Max	NIOSH 6604 : 1996
6	Acid Mist (volatile acids) as HCl	mg/m ³	5.463		NIOSH 7907 : 2014

End of Report

Remarks : Limits for Air Contaminants as per OSHA

BLQ : Below limit of Quantification / LOQ : Limit of Quantification

Md. Asif Akbar
Sr. Manager (Env.)



HARYANA TEST HOUSE

& Consultancy Services

GOVT. RECOGNISED LABORATORY

50-C, Sector-25 Part-II, HUDA, PANIPAT-132 103 (HR.)

Contact : (Off.) 86077-70160, 0180-3510205 (Env.) 86077-70164, (BM) 86077-70166, (Food) 86077-70169
Web Site : www.haryanatesthouse.net, e-mail : haryanatesthousees@gmail.com, info@haryanatesthouse.net



TC-7811



Recognition / Approval : MoEF / FSSAI / BIS / ISO 9001, 14001, 45001 Certified Lab.

TEST REPORT

Issued To:

Crystal Crop. Protection Ltd.,
(Unit- Technical Plant) Village & PO Nathupur, Sonapat (HR)

Report No. : HTH/EP/220806039

ULR No. : TC781122100004514F

Party's Ref No. : Nil

Booking Date : 06/08/2022

Period of Testing : 06/08/2022 To 11/08/2022

Reporting Date : 11/08/2022

Sample Description : Noise Level Monitoring-Ambient Noise

Type of Industry : Pesticides Industry
Description : Noise Level Monitoring-Ambient Noise
Sample Location : Near Hydrent
Date of measurement : 05/08/2022
Purpose of analysis : Monitoring
Sample collected/ supplied by : By our Lab. Representative

TEST RESULTS

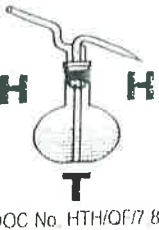
S.N.	Time (In Hours)	Noise Level Cum Leq. dB (A)
1	06:00 to 07:00	74.1
2	07:00 to 08:00	78.6
3	08:00 to 09:00	76.5
4	09:00 to 10:00	71.3
5	10:00 to 11:00	74.3
6	11:00 to 12:00	70.5
7	12:00 to 13:00	71.6
8	13:00 to 14:00	73.5
9	14:00 to 15:00	71.6
10	15:00 to 16:00	74.4
11	16:00 to 17:00	71.0
12	17:00 to 18:00	71.4
13	18:00 to 19:00	77.8
14	19:00 to 20:00	76.1
15	20:00 to 21:00	72.1
16	21:00 to 22:00	75.2
17	22:00 to 23:00	68.4
18	23:00 to 24:00	69.2
19	24:00 to 01:00	68.1
20	01:00 to 02:00	67.4
21	02:00 to 03:00	56.7
22	03:00 to 04:00	57.8
23	04:00 to 05:00	56.4
24	05:00 to 06:00	67.2
Lday (06:00 AM to 10:00 PM)		73.7
LNight (10:00 PM to 06:00 AM)		63.9

End of Report

Remarks : Leq:- It is an energy mean of the noise level over a specified period

Kimh.
11.08.2022
Review by

HARYANA TEST HOUSE
Authorized Signatory
Md. Asif Ansari
Sr. Manager (Env.)



HARYANA TEST HOUSE

& Consultancy Services

GOVT. RECOGNISED LABORATORY

50-C, Sector-25 Part-II, HUDA, PANIPAT-132 103 (HR.)

Contact : (Off.) 86077-70160, 0180-3510205 (Env.) 86077-70164, (BM) 86077-70166, (Food) 86077-70169
Web Site : www.haryanatesthouse.net, e-mail : haryanatesthousecs@gmail.com, info@haryanatesthouse.net



TC-7811



Recognition / Approval : MoEF / FSSAI / BIS / ISO 9001, 14001, 45001 Certified Lab.

TEST REPORT

Issued To:

Crystal Crop. Protection Ltd.,

(Unit- Technical Plant) Village & PO Nathupur, Sonapat (HR)

Report No. : HTH/EP/220806040

ULR No. : TC781122100004515F

Party's Ref No. : Nil

Booking Date : 06/08/2022

Period of Testing : 06/08/2022 To 11/08/2022

Reporting Date : 11/08/2022

Sample Description : Noise Level Monitoring-Ambient Noise

Type of Industry : Pesticides Industry
Description : Noise Level Monitoring-Ambient Noise
Sample Location : Near Gate No.5
Date of measurement : 05/08/2022
Purpose of analysis : Monitoring
Sample collected/ supplied by : By our Lab. Representative

TEST RESULTS

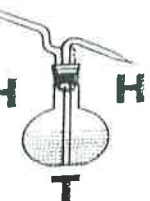
S.N.	Time (In Hours)	Noise Level Cum Leq. dB (A)
1	06:00 to 07:00	73.1
2	07:00 to 08:00	77.6
3	08:00 to 09:00	75.5
4	09:00 to 10:00	70.3
5	10:00 to 11:00	73.3
6	11:00 to 12:00	69.5
7	12:00 to 13:00	70.6
8	13:00 to 14:00	72.5
9	14:00 to 15:00	70.6
10	15:00 to 16:00	73.4
11	16:00 to 17:00	70.0
12	17:00 to 18:00	70.4
13	18:00 to 19:00	76.8
14	19:00 to 20:00	75.1
15	20:00 to 21:00	71.1
16	21:00 to 22:00	74.2
17	22:00 to 23:00	67.4
18	23:00 to 24:00	68.2
19	24:00 to 01:00	67.1
20	01:00 to 02:00	66.4
21	02:00 to 03:00	55.7
22	03:00 to 04:00	56.8
23	04:00 to 05:00	55.4
24	05:00 to 06:00	66.2
Lday (06:00 AM to 10:00 PM)		72.7
LNight (10:00 PM to 06:00 AM)		62.9

End of Report

Remarks : Standard Limits: 90 dB (A) As per OSHA, Standard Number : 1910.95, Occupational Noise Exposure

Kimh.
11.08.2022
Review by

Signature of Sr. Manager (Env.)
Sr. Manager (Env.)



OC No. HTH/QF/7.8

HARYANA TEST HOUSE

& Consultancy Services

GOVT. RECOGNISED LABORATORY

50-C, Sector-25 Part-II, HUDA, PANIPAT-132 103 (HR.)

Contact : (Off.) 86077-70160, 0180-3510205 (Env.) 86077-70164, (BM) 86077-70166, (Food) 86077-70169
Web Site : www.haryanatesthouse.net, e-mail : haryanatesthousecs@gmail.com, info@haryanatesthouse.net

TC-7811



Recognition / Approval : MoEF / FSSAI / BIS / ISO 9001, 14001, 45001 Certified Lab.

TEST REPORT

Issued To:

Crystal Crop. Protection Ltd.,

(Unit- Technical Plant) Village & PO Nathupur, Sonapat (HR)

Report No. : HTH/EP/220806041

ULR No. : TC781122100004517F

Party's Ref No. : Nil

Booking Date : 06/08/2022

Period of Testing : 06/08/2022 To 11/08/2022

Reporting Date : 11/08/2022

Sample Description : Noise Level Monitoring-Ambient Noise

Type of Industry : Pesticides Industry
Description : Noise Level Monitoring-Ambient Noise
Sample Location : Near Boiler Area
Date of measurement : 05/08/2022
Purpose of analysis : Monitoring
Sample collected/ supplied by : By our Lab. Representative

TEST RESULTS

S.N.	Time (In Hours)	Noise Level Cum Leq. dB (A)
1	06:00 to 07:00	71.1
2	07:00 to 08:00	75.6
3	08:00 to 09:00	73.5
4	09:00 to 10:00	68.3
5	10:00 to 11:00	71.3
6	11:00 to 12:00	67.5
7	12:00 to 13:00	68.6
8	13:00 to 14:00	70.5
9	14:00 to 15:00	68.6
10	15:00 to 16:00	71.4
11	16:00 to 17:00	68.0
12	17:00 to 18:00	68.4
13	18:00 to 19:00	74.8
14	19:00 to 20:00	73.1
15	20:00 to 21:00	69.1
16	21:00 to 22:00	72.2
17	22:00 to 23:00	69.4
18	23:00 to 24:00	70.2
19	24:00 to 01:00	69.1
20	01:00 to 02:00	68.4
21	02:00 to 03:00	57.7
22	03:00 to 04:00	58.8
23	04:00 to 05:00	57.4
24	05:00 to 06:00	68.2
Lday (06:00 AM to 10:00 PM)		70.7
LNight (10:00 PM to 06:00 AM)		64.9

End of Report

Remarks : Leq:- It is an energy mean of the noise level over a specified period

Kirti
11-08-2022
Review by

Page No.: 1 of 1



HARYANA TEST HOUSE

& Consultancy Services

GOVT. RECOGNISED LABORATORY

50-C, Sector-25 Part-II, HUDA, PANIPAT-132 103 (HR.)

Contact : (Off.) 86077-70160, 0180-3510205 (Env.) 86077-70164, (BM) 86077-70166, (Food) 86077-70169
Web Site : www.haryanatesthouse.net, e-mail : haryanatesthousecs@gmail.com, info@haryanatesthouse.net



Recognition / Approval : MoEF / FSSAI / BIS / ISO 9001, 14001, 45001 Certified Lab.

TEST REPORT

Issued To:

Crystal Crop. Protection Ltd.,

(Unit- Technical Plant) Village & PO Nathupur, Sonapat (HR)

Report No. : HTH/WT/220808008

Party's Ref No. : Nil

Booking Date : 08/08/2022

Period of Testing : 08/08/2022 To 13/08/2022

Reporting Date : 13/08/2022

Sample Description : Raw Water Sample
Type of Industry : Pesticides Manufacturing
Date of sampling : 08/08/2022
Date of receipt of sample : 08/08/2022
Environmental Condition : Temp. 38°C & Humidity 52%
Sampling Reference Protocol : IS 1622 : 1981

Sample Name : Raw Water Sample (Piezometer)
Sample quantity : 5 Ltr.
Sample Location : Piezometer
Purpose of analysis : Monitoring
Sampling Done by : By our lab. Representative

REFERENCE TO PROTOCOL : IS 10500:2012(Amend No. 4 Nov. 2021)

TEST RESULTS

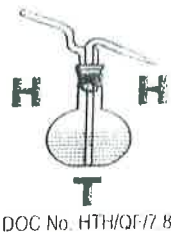
S.N.	Parameter's	Unit's	Results	Acceptable Limit's	Permissible Limit's	Method of Analysis
Discipline - Chemical, Group -Water						
Organoleptic and Physical Parameter's						
1	pH	-	7.32	6.5-8.5	No Relaxation	IS 3025 (Part 11): 2022
2	Total Dissolved Solids (TDS)	mg/l	2426.0	500 Max.	2000 Max.	IS 3025 (P-16)-1984
General parameters Concerning Substances undesirable in excessive amounts						
1	Chloride (as Cl)	mg/l	329.90	250 Max.	1000 Max.	IS 3025 (P-32)-1988
2	Sulphate (as SO ₄)	mg/l	478.2	200 Max.	400 Max.	IS 3025 (Part 24): Sec-1 2022
3	Total Alkalinity (as CaCO ₃)	mg/l	430.0	200 Max.	600 Max.	IS 3025 (P-23)-1986
4	Total Hardness (as CaCO ₃)	mg/l	910.0	200 Max.	600 Max.	IS 3025 (P-21)-2009
5	BOD	mg/l	BLQ(LOQ:2.0)	-	-	IS 3025 (P-44)-1993
6	COD	mg/l	BLQ(LOQ:4.0)	-	-	IS 3025 (P-58)-2006
7	Sodium (as Na)	mg/l	330.65	-	-	IS 3025 (P-45)-1993
8	Potassium (as K)	mg/l	3.12	-	-	IS 3025 (P-45)-1993

End of Report

Remarks : BLQ : Below limit of Quantification / LOQ : Limit of Quantification.

Reviewed by
13-8-22





HARYANA TEST HOUSE

& Consultancy Services

GOVT. RECOGNISED LABORATORY

50-C, Sector-25 Part-II, HUDA, PANIPAT-132 103 (HR.)

Contact : (Off) 86077 70160, 0180-3510205 (Fax) 86077-70164, (BM) 86077 70166, (Food) 86077 70169

Web Site : www.haryanatesthouse.net, e-mail : haryanatesthousecs@gmail.com, info@haryanatesthouse.net



Recognition / Approval : MoEF / FSSAI / BIS / ISO 9001, 14001, 45001 Certified Lab.

TEST REPORT

Issued To:

Crystal Crop. Protection Ltd.,

(Unit- Technical Plant) Village & PO Nathupur, Sonapat (HR)

Report No. : HTH/WT/221017002

ULR No. : TC781122200002291F

Party's Ref No. : Nil

Booking Date : 17/10/2022

Period of Testing : 17/10/2022 To 27/10/2022

Reporting Date : 27/10/2022

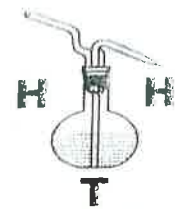
Sample Description : Ground Water Sample
Type of Industry : Pesticide Manufacturing
Date of sampling : 16/10/2022
Date of receipt of sample : 17/10/2022
Environmental Condition : Temp. 29°C & Humidity 49%
Sampling Reference Protocol : IS 1622 : 1981

Sample Name : Ground Water Sample
Sample quantity : 5 Ltr. + 250 ml in sterilized bottle
Sample Location : Nathupura Village
Purpose of analysis : Monitoring
Sampling Done by : By our Lab. Representative

REFERENCE TO PROTOCOL : IS 10500:2012(Amend No. 4 Nov. 2021)

TEST RESULTS

S.N.	Parameter's	Unit's	Results	Acceptable Limit's	Permissible Limit's	Method of Analysis
Discipline - Chemical, Group -Water						
Organoleptic and Physical Parameter's						
1	Colour (Hazen)	-	1.0	5 Max.	15 Max.	IS 3025 (P-4)-2021
2	Odour	-	Agreeable	Agreeable	Agreeable	IS 3025 (P-5)-2018
3	pH	-	7.47	6.5-8.5	No Relaxation	IS 3025 (P-11)-1983
4	Turbidity (NTU)	-	<1.0	1 Max.	5 Max.	IS 3025 (P-10)-1984
5	Total Dissolved Solids (TDS)	mg/l	1056.0	500 Max.	2000 Max.	IS 3025 (P-16)-1984
General parameters Concerning Substances undesirable in excessive amounts						
1	Total Ammonia (as N)	mg/l	BLQ(LOQ:0.2)	0.5 Max.	No Relaxation	IS 3025 (P-34)-2021
2	Calcium (as Ca)	mg/l	73.7	75 Max.	200 Max.	IS 3025 (P-40)-1991
3	Chloride (as Cl)	mg/l	169.95	250 Max.	1000 Max.	IS 3025 (P-32)-1988
4	Fluoride (as F)	mg/l	0.6	1.0 Max.	1.5 Max.	APHA (4500 F)
5	Magnesium (as Mg)	mg/l	70.13	30 Max.	100 Max.	IS 3025 (P-46)-1994
6	Nitrate (as NO ₃)	mg/l	46.30	45 Max.	No Relaxation	IS 3025 (P-34)-2021
7	Phenolic Compounds (as C ₆ H ₅ OH)	mg/l	BLQ(LOQ:0.0004)	0.001 Max.	0.002 Max.	IS 3025 (P-43)-1992
8	Sulphate (as SO ₄)	mg/l	162.5	200 Max.	400 Max.	IS 3025 (P-24)-1986
9	Total Alkalinity (as CaCO ₃)	mg/l	344.0	200 Max.	600 Max.	IS 3025 (P-23)-1986
10	Total Hardness (as CaCO ₃)	mg/l	472.0	200 Max.	600 Max.	IS 3025 (P-21)-2009
Discipline- Chemical, Group-Residue In Water						
METALS						
1	Aluminium (as Al)	mg/l	BLQ(LOQ:0.010)	0.03 Max.	0.2 Max.	HTH/QF/7.2/2/ICP-01,SOP NO-18
2	Barium (as Ba)	mg/l	0.057	0.7 Max.	No Relaxation	HTH/QF/7.2/2/ICP-01,SOP NO-18
3	Molybdenum (as Mo)	mg/l	0.004	0.07 Max.	No Relaxation	HTH/QF/7.2/2/ICP-01,SOP NO-18
4	Boron (as B)	mg/l	0.077	0.5 Max.	2.4 Max.	HTH/QF/7.2/2/ICP-01,SOP NO-18



HARYANA TEST HOUSE

& Consultancy Services

GOVT. RECOGNISED LABORATORY

50-C, Sector-25 Part-II, HUDA, PANIPAT-132 103 (HR.)

Contact : (Off.) 86077-70160, 0180-3510205 (Env.) 86077-70164, (BM) 86077-70166, (Food) 86077-70169
Web Site : www.haryanatesthouse.net, e-mail : haryanatesthousecs@gmail.com, info@haryanatesthouse.net



Recognition / Approval : MoEF / FSSAI / BIS / ISO 9001, 14001, 45001 Certified Lab.

TEST REPORT

Issued To:

Crystal Crop. Protection Ltd.,
(Unit- Technical Plant) Village & PO Nathupur, Sonapat (HR)

Report No. : HTH/WT/221017002
ULR No. : TC781122200002291F
Party's Ref No. : Nil

Booking Date : 17/10/2022
Period of Testing : 17/10/2022 To 27/10/2022
Reporting Date : 27/10/2022

TEST RESULTS

S.N.	Parameter's	Unit's	Results	Acceptable Limit's	Permissible Limit's	Method of Analysis
5	Copper (as Cu)	mg/l	0.004	0.05 Max.	1.5 Max.	HTH/QF/7.2/2/ICP-01,SOP NO-18
6	Iron (as Fe)	mg/l	0.227	1.0 Max.	No Relaxation	HTH/QF/7.2/2/ICP-01,SOP NO-18
7	Manganese (as Mn)	mg/l	0.030	0.1 Max.	0.3 Max.	HTH/QF/7.2/2/ICP-01,SOP NO-18
8	Selenium (as Se)	mg/l	BLQ(LOQ:0.005)	0.01 Max.	No Relaxation	HTH/QF/7.2/2/ICP-01,SOP NO-18
9	Silver (as Ag)	mg/l	BLQ(LOQ:0.001)	0.1 Max.	No Relaxation	HTH/QF/7.2/2/ICP-01,SOP NO-18
10	Zinc (as Zn)	mg/l	0.196	5.0 Max.	15 Max.	HTH/QF/7.2/2/ICP-01,SOP NO-18
TOXIC SUBSTANCES						
1	Cadmium (as Cd)	mg/l	BLQ(LOQ:0.001)	0.003 Max.	No Relaxation	HTH/QF/7.2/2/ICP-01,SOP NO-18
2	Lead (as Pb)	mg/l	3LQ(LOQ:0.001)	0.01 Max.	No Relaxation	HTH/QF/7.2/2/ICP-01,SOP NO-18
3	Mercury (as Hg)	mg/l	BLQ(LOQ:0.0005)	0.001 Max.	No Relaxation	HTH/QF/7.2/2/ICP-01,SOP NO-18
4	Nickel (as Ni)	mg/l	BLQ(LOQ:0.001)	0.02 Max.	No Relaxation	HTH/QF/7.2/2/ICP-01,SOP NO-18
5	Total Arsenic (as As)	mg/l	BLQ(LOQ:0.001)	0.01 Max.	No Relaxation	HTH/QF/7.2/2/ICP-01,SOP NO-18
6	Total Chromium (as Cr)	mg/l	BLQ(LOQ:0.001)	0.05 Max.	No Relaxation	HTH/QF/7.2/2/ICP-01,SOP NO-18
7	Cyanide (as CN)	mg/l	BLQ(LOQ:0.02)	0.05 Max.	No Relaxation	IS 3025 (P-27) :2021
Discipline - Biological, Group - Water						
Bacteriological Requirements						
1	Coliform	Per 100 ml	Absent	Shall Not be Detectable	No Relaxation	IS:15185:2016
2	E.coli	Per 100 ml	Absent	Shall Not be Detectable	No Relaxation	IS:15185:2016

End of Report

Remarks : BLQ: Below Limit of Quantification/ LOQ: Limit of Quantification.

Review by
27/10/2022

Manendra Kumar
Sr. Microbiologist (Biological)

Rishabh Dya
CEO, (Chemical)



DOC No. HTH/QF/7/8

HARYANA TEST HOUSE

& Consultancy Services

GOVT. RECOGNISED LABORATORY

50-C, Sector-25 Part-II, HUDA, PANIPAT-132 103 (HR.)

Contact : (OIT) 86077-70160, 0180-3510205 (Env.) 86077-70164, (BM) 86077-70166, (Food) 86077-70169
Web Site : www.haryanatesthouse.net, e-mail : haryanatesthousecs@gmail.com, info@haryanatesthouse.net

TC-7811



Recognition / Approval : MoEF / FSSAI / BIS / ISO 9001, 14001, 45001 Certified Lab.

TEST REPORT

Issued To:

Crystal Crop. Protection Ltd.,

(Unit- Technical Plant) Village & PO Nathupur, Sonapat (HR)

Report No. : HTH/WT/221017003

ULR No. : TC781122200002292F

Party's Ref No. : Nil

Booking Date : 17/10/2022

Period of Testing : 17/10/2022 To 27/10/2022

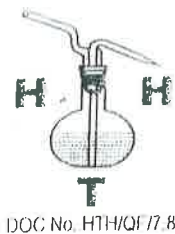
Reporting Date : 27/10/2022

Sample Description : Ground Water Sample
Type of Industry : Pesticide Manufacturing
Date of sampling : 16/10/2022
Date of receipt of sample : 17/10/2022
Environmental Condition : Temp. 29°C & Humidity 49%
Sampling Reference Protocol : IS 1622 : 1981
REFERENCE TO PROTOCOL : IS 10500:2012(Amend No. 4 Nov. 2021)

Sample Name : Ground Water Sample
Sample quantity : 5 Ltr. + 250 ml in sterilized bottle
Sample Location : Rasoi Village
Purpose of analysis : Monitoring
Sampling Done by : By our Lab. Representative

TEST RESULTS

S.N.	Parameter's	Unit's	Results	Acceptable Limit's	Permissible Limit's	Method of Analysis
Discipline - Chemical, Group -Water						
Organoleptic and Physical Parameter's						
1	Colour (Hazen)	-	1.0	5 Max.	15 Max.	IS 3025 (P-4)-2021
2	Odour	-	Agreeable	Agreeable	Agreeable	IS 3025 (P-5)-2018
3	pH	-	7.88	6.5-8.5	No Relaxation	IS 3025 (P-11)-1983
4	Turbidity (NTU)	-	<1.0	1 Max.	5 Max.	IS 3025 (P-10)-1984
5	Total Dissolved Solids (TDS)	mg/l	910.0	500 Max.	2000 Max.	IS 3025 (P-16)-1984
General parameters Concerning Substances undesirable in excessive amounts						
1	Total Ammonia (as N)	mg/l	BLQ(LOQ:0.2)	0.5 Max.	No Relaxation	IS 3025 (P-34)-2021
2	Calcium (as Ca)	mg/l	56.1	75 Max.	200 Max.	IS 3025 (P-40)-1991
3	Chloride (as Cl)	mg/l	237.93	250 Max.	1000 Max.	IS 3025 (P-32)-1988
4	Fluoride (as F)	mg/l	0.7	1.0 Max.	1.5 Max.	APHA (4500 F)
5	Magnesium (as Mg)	mg/l	57.47	30 Max.	100 Max.	IS 3025 (P-46)-1994
6	Nitrate (as NO ₃)	mg/l	38.60	45 Max.	No Relaxation	IS 3025 (P-34)-2021
7	Phenolic Compounds (as C ₆ H ₅ OH)	mg/l	BLQ(LOQ:0.0004)	0.001 Max.	0.002 Max.	IS 3025 (P-43)-1992
8	Sulphate (as SO ₄)	mg/l	172.5	200 Max.	400 Max.	IS 3025 (P-24)-1986
9	Total Alkalinity (as CaCO ₃)	mg/l	272.0	200 Max.	600 Max.	IS 3025 (P-23)-1986
10	Total Hardness (as CaCO ₃)	mg/l	376.0	200 Max.	600 Max.	IS 3025 (P-21)-2009
Discipline- Chemical, Group-Residue in Water						
METALS						
1	Aluminium (as Al)	mg/l	BLQ(LOQ:0.010)	0.03 Max.	0.2 Max.	HTH/QF/7.2/2/ICP-01,SOP NO-18
2	Barium (as Ba)	mg/l	0.030	0.7 Max.	No Relaxation	HTH/QF/7.2/2/ICP-01,SOP NO-18
3	Molybdenum (as Mo)	mg/l	0.004	0.07 Max	No Relaxation	HTH/QF/7.2/2/ICP-01,SOP NO-18
4	Boron (as B)	mg/l	0.115	0.5 Max.	2.4 Max.	HTH/QF/7.2/2/ICP-01,SOP NO-18



HARYANA TEST HOUSE

& Consultancy Services

GOVT. RECOGNISED LABORATORY



TC-7811



50-C, Sector-25 Part-II, HUDA, PANIPAT-132 103 (HR.)

Contact : (Off.) 86077 70164, 0180 3510205 (Fax) 86077 70164, (BM) 86077 70166, (Food) 86077 70167

Web Site : www.haryanatesthouse.net, e-mail : haryanatesthousecs@gmail.com, info@haryanatesthouse.net

Recognition / Approval : MoEF / FSSAI / BIS / ISO 9001, 14001, 45001 Certified Lab.

TEST REPORT

Issued To:

Crystal Crop. Protection Ltd.,
(Unit- Technical Plant) Village & PO Nathupur, Sonapat (HR)

Report No. : HTH/WT/221017003

ULR No. : TC781122200002292F

Party's Ref No. : Nil

Booking Date : 17/10/2022

Period of Testing : 17/10/2022 To 27/10/2022

Reporting Date : 27/10/2022

TEST RESULTS

S.N.	Parameter's	Unit's	Results	Acceptable Limit's	Permissible Limit's	Method of Analysis
5	Copper (as Cu)	mg/l	BLQ(LOQ:0.001)	0.05 Max.	1.5 Max.	HTH/QF/7.2/2/ICP-01,SOP NO-18
6	Iron (as Fe)	mg/l	0.445	1.0 Max.	No Relaxation	HTH/QF/7.2/2/ICP-01,SOP NO-18
7	Manganese (as Mn)	mg/l	0.032	0.1 Max.	0.3 Max.	HTH/QF/7.2/2/ICP-01,SOP NO-18
8	Selenium (as Se)	mg/l	BLQ(LOQ:0.005)	0.01 Max.	No Relaxation	HTH/QF/7.2/2/ICP-01,SOP NO-18
9	Silver (as Ag)	mg/l	BLQ(LOQ:0.001)	0.1 Max.	No Relaxation	HTH/QF/7.2/2/ICP-01,SOP NO-18
10	Zinc (as Zn)	mg/l	0.268	5.0 Max.	15 Max.	HTH/QF/7.2/2/ICP-01,SOP NO-18
TOXIC SUBSTANCES						
1	Cadmium (as Cd)	mg/l	BLQ(LOQ:0.001)	0.003 Max.	No Relaxation	HTH/QF/7.2/2/ICP-01,SOP NO-18
2	Lead (as Pb)	mg/l	BLQ(LOQ:0.001)	0.01 Max.	No Relaxation	HTH/QF/7.2/2/ICP-01,SOP NO-18
3	Mercury (as Hg)	mg/l	PLQ(LOQ:0.0005)	0.001 Max.	No Relaxation	HTH/QF/7.2/2/ICP-01,SOP NO-18
4	Nickel (as Ni)	mg/l	BLQ(LOQ:0.001)	0.02 Max.	No Relaxation	HTH/QF/7.2/2/ICP-01,SOP NO-18
5	Total Arsenic (as As)	mg/l	BLQ(LOQ:0.001)	0.01 Max.	No Relaxation	HTH/QF/7.2/2/ICP-01,SOP NO-18
6	Total Chromium (as Cr)	mg/l	BLQ(LOQ:0.001)	0.05 Max.	No Relaxation	HTH/QF/7.2/2/ICP-01,SOP NO-18
7	Cyanide (as CN)	mg/l	BLQ(LOQ:0.02)	0.05 Max.	No Relaxation	IS 3025 (P-27) :2021
Discipline - Biological, Group - Water						
Bacteriological Requirements						
1	Coliform	Per 100 ml	Absent	Shall Not be Detectable	No Relaxation	IS:15185:2016
2	E.coli	Per 100 ml	Absent	Shall Not be Detectable	No Relaxation	IS:15185:2016

End of Report

Remarks : BLQ: Below Limit of Quantification/ LOQ: Limit of Quantification.

Reviewed by
27/10/2022

Manendra Kumar
Sr. Microbiologist (Biological)

27/10/2022
Bishab Dya
CEO, (Chemical)



HARYANA TEST HOUSE

& Consultancy Services

GOVT. RECOGNISED LABORATORY

50-C, Sector-25 Part-II, HUDA, PANIPAT-132 103 (HR.)

Contact : (Off.) 86077-70160, 0180-3510205 (Env.) 86077-70164, (HM) 86077-70166, (Food) 86077-70169
Web Site : www.haryanatesthouse.net, e-mail : haryanatesthousees@gmail.com, info@haryanatesthouse.net



TC-7811



Recognition / Approval : MoEF / FSSAI / BIS / ISO 9001, 14001, 45001 Certified Lab.

TEST REPORT

Issued To:

Crystal Crop. Protection Ltd.,

(Unit- Technical Plant) Village & PO Nathupur, Sonapat (HR)

Report No. : HTH/WT/220804007

ULR No. : TC781122200001677F

Party's Ref No. : Nil

Booking Date : 04/08/2022

Period of Testing : 04/08/2022 To 10/08/2022

Reporting Date : 10/08/2022

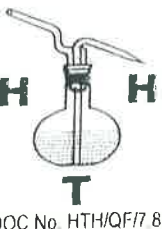
Sample Description : Borewell Water Sample
Type of Industry : Pesticide Manufacturing
Date of sampling : 04/08/2022
Date of receipt of sample : 04/08/2022
Environmental Condition : Temp. 33°C & Humidity 85%
Sampling Reference Protocol : IS 1622 : 1981

Sample Name : Borewell Water Sample
Sample quantity : 5 Ltr. + 250 ml in sterilized bottle
Sample Location : Borewell Outlet
Purpose of analysis : Monitoring
Sampling Done by : By our Lab. Representative

REFERENCE TO PROTOCOL : IS 10500:2012(Amend No. 4 Nov. 2021)

TEST RESULTS

S.N.	Parameter's	Unit's	Results	Acceptable Limit's	Permissible Limit's	Method of Analysis
Discipline - Chemical, Group -Water						
Organoleptic and Physical Parameter's						
1	Colour (Hazen)	-	1.0	5 Max.	15 Max.	IS 3025 (P-4)-2021
2	Odour	-	Agreeable	Agreeable	Agreeable	IS 3025 (P-5)-2018
3	pH	-	6.63	6.5-8.5	No Relaxation	IS 3025 (P-11)-1983
4	Turbidity (NTU)	-	<1.0	1 Max.	5 Max.	IS 3025 (P-10)-1984
5	Total Dissolved Solids (TDS)	mg/l	2358.0	500 Max.	2000 Max.	IS 3025 (P-16)-1984
General parameters Concerning Substances undesirable in excessive amounts						
1	Total Ammonia (as N)	mg/l	BLQ(LOQ:0.2)	0.5 Max.	No Relaxation	IS 3025 (P-34)-2021
2	Calcium (as Ca)	mg/l	100.2	75 Max.	200 Max.	IS 3025 (P-40)-1991
3	Chloride (as Cl)	mg/l	589.82	250 Max.	1000 Max.	IS 3025 (P-32)-1988
4	Fluoride (as F)	mg/l	0.96	1.0 Max.	1.5 Max.	APHA (4500 F)
5	Magnesium (as Mg)	mg/l	165.58	30 Max.	100 Max.	IS 3025 (P-46)-1994
6	Nitrate (as NO ₃)	mg/l	51.0	45 Max.	No Relaxation	IS 3025 (P-34)-2021
7	Phenolic Compounds (as C ₆ H ₅ OH)	mg/l	BLQ(LOQ:0.0004)	0.001 Max.	0.002 Max.	IS 3025 (P-43)-1992
8	Sulphate (as SO ₄)	mg/l	137.8	200 Max.	400 Max.	IS 3025 (P-24)-1986
9	Total Alkalinity (as CaCO ₃)	mg/l	425.0	200 Max.	600 Max.	IS 3025 (P-23)-1986
10	Total Hardness (as CaCO ₃)	mg/l	930.0	200 Max.	600 Max.	IS 3025 (P-21)-2009
Discipline- Chemical, Group-Residue in Water						
METALS						
1	Aluminium (as Al)	mg/l	BLQ(LOQ:0.010)	0.03 Max.	0.2 Max.	HTH/QF/7.2/2/ICP-01,SOP NO-18
2	Barium (as Ba)	mg/l	0.040	0.7 Max.	No Relaxation	HTH/QF/7.2/2/ICP-01,SOP NO-18
3	Molybdenum (as Mo)	mg/l	0.003	0.07 Max	No Relaxation	HTH/QF/7.2/2/ICP-01,SOP NO-18
4	Boron (as B)	mg/l	0.234	0.5 Max.	2.4 Max.	HTH/QF/7.2/2/ICP-01,SOP NO-18
5	Copper (as Cu)	mg/l	0.001	0.05 Max.	1.5 Max.	HTH/QF/7.2/2/ICP-01,SOP NO-18



HARYANA TEST HOUSE

& Consultancy Services

GOVT. RECOGNISED LABORATORY

50-C, Sector-25 Part-II, HUDA, PANIPAT-132 103 (HR.)

Contact : (Off.) 86077-70160, 0180-3510205 (Inv.) 86077-70164, (BM) 86077-70166, (Food) 86077-70169
Web Site : www.haryanatesthouse.net, e-mail : haryanatesthousecs@gmail.com, info@haryanatesthouse.net



TC-7811



Recognition / Approval : MoEF / FSSAI / BIS / ISO 9001, 14001, 45001 Certified Lab.

TEST REPORT

Issued To:

Crystal Crop. Protection Ltd.,

(Unit- Technical Plant) Village & PO Nathupur, Sonapat (HR)

Report No. : HTH/WT/220804007

ULR No. : TC781122200001677F

Party's Ref No. : Nil

Booking Date : 04/08/2022

Period of Testing : 04/08/2022 To 10/08/2022

Reporting Date : 10/08/2022

TEST RESULTS

S.N.	Parameter's	Unit's	Results	Acceptable Limit's	Permissible Limit's	Method of Analysis
5						NO-18
6	Iron (as Fe)	mg/l	0.311	1.0 Max.	No Relaxation	HTH/QF/7.2/2/ICP-01,SOP NO-18
7	Manganese (as Mn)	mg/l	0.005	0.1 Max.	0.3 Max.	HTH/QF/7.2/2/ICP-01,SOP NO-18
8	Selenium (as Se)	mg/l	0.006	0.01 Max.	No Relaxation	HTH/QF/7.2/2/ICP-01,SOP NO-18
9	Silver (as Ag)	mg/l	BLQ(LOQ:0.001)	0.1 Max.	No Relaxation	HTH/QF/7.2/2/ICP-01,SOP NO-18
10	Zinc (as Zn)	mg/l	BLQ(LOQ:0.05)	5.0 Max.	15 Max.	HTH/QF/7.2/2/ICP-01,SOP NO-18
TOXIC SUBSTANCES						
1	Cadmium (as Cd)	mg/l	BLQ(LOQ:0.001)	0.003 Max.	No Relaxation	HTH/QF/7.2/2/ICP-01,SOP NO-18
2	Lead (as Pb)	mg/l	BLQ(LOQ:0.001)	0.01 Max.	No Relaxation	HTH/QF/7.2/2/ICP-01,SOP NO-18
3	Mercury (as Hg)	mg/l	BLQ(LOQ:0.0005)	0.001 Max.	No Relaxation	HTH/QF/7.2/2/ICP-01,SOP NO-18
4	Nickel (as Ni)	mg/l	BLQ(LOQ:0.001)	0.02 Max.	No Relaxation	HTH/QF/7.2/2/ICP-01,SOP NO-18
5	Total Arsenic (as As)	mg/l	BLQ(LOQ:0.001)	0.01 Max.	No Relaxation	HTH/QF/7.2/2/ICP-01,SOP NO-18
6	Total Chromium (as Cr)	mg/l	BLQ(LOQ:0.001)	0.05 Max.	No Relaxation	HTH/QF/7.2/2/ICP-01,SOP NO-18
7	Cyanide (as CN)	mg/l	BLQ(LOQ:0.02)	0.05 Max.	No Relaxation	IS 3025 (P-27) :2021
Discipline - Biological, Group - Water						
Bacteriological Requirements						
1	Coliform	Per 100 ml	Absent	Shall Not be Detectable	No Relaxation	IS:15185:2016
2	E.coli	Per 100 ml	Absent	Shall Not be Detectable	No Relaxation	IS:15185:2016

End of Report

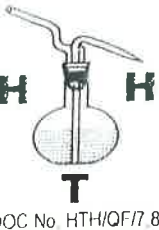
Remarks : BLQ : Below limit of Quantification / LOQ : Limit of Quantification

Signature of Reviewer
10.08.22
Review by

Nao Jyoti Gupta
H.O.D. (Biological)



Signature of Sr. Manager
10.08.22
Sr. Manager (Env.)



HARYANA TEST HOUSE

& Consultancy Services

GOVT. RECOGNISED LABORATORY

50-C, Sector-25 Part-II, RUDA, PANIPAT-132 103 (HR.)

Contact : (Off.) 86077-70160, 0180-3510205 (Env.) 86077-70164, (BM) 86077-70166, (Food) 86077-70169
Web Site : www.haryanatesthouse.net, e-mail : haryanatesthousecs@gmail.com, info@haryanatesthouse.net



TC-7811



Recognition / Approval : MoEF / FSSAI / BIS / ISO 9001, 14001, 45001 Certified Lab.

TEST REPORT

Issued To: Crystal Crop. Protection Ltd., (Unit- Technical Plant) Village & PO Nathupur, Sonapat (HR)	Report No. : HTH/EP/220804005 ULR No. : TC781122100004496F Party's Ref No. : Nil Booking Date : 04/08/2022 Period of Testing : 04/08/2022 To 09/08/2022 Reporting Date : 09/08/2022
---	--

Sample Description	: Effluent Water Sample (ETP-Outlet)
Type of Industry	: Pesticide manufacturing
Sample type	: Effluent Water Sample (ETP-Outlet)
Date of sampling	: 04/08/2022
Date of receipt of sample	: 04/08/2022
Sample Location	: ETP-Outlet
Sample quantity	: 2 Ltr.
Purpose of analysis	: Monitoring
Sample collected/ supplied by	: By our Lab. Representative

TEST RESULTS

S.N.	Test Parameters	Unit	Result	Limit as per EP Act. 1986 (Inland Surface Water)	Test Method
Discipline : Chemical, Group : Waste Water					
1	Odour	-	Odourless	-	IS 3025 (Part 5): 2018
2	pH	-	6.83	5.5 - 9.0	IS 3025 (Part 11): 1993
3	Total Suspended Solids	mg/L	4.0	100 Max	IS 3025 (Part 17): 1984
4	Chemical Oxygen Demand(COD)	mg/L	25.0	250 Max	IS 3025 (Part 58): 2006
5	Biochemical Oxygen Demand (BOD) 3 Days at 27°C	mg/L	6.0	30 Max	IS 3025 (Part 44): 1993
6	Oil & Grease	mg/L	BLQ(LOQ 0.5)	10 Max	IS 3025 (Part 39): 2021

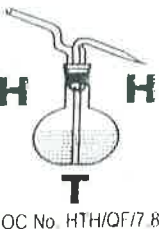
End of Report

Remarks : BLQ : Below limit of Quantification / LOQ : Limit of Quantification



Review by
09-8-22





HARYANA TEST HOUSE

& Consultancy Services

GOVT. RECOGNISED LABORATORY

50-C, Sector-25 Part-II, HUDA, PANIPAT-132 103 (HR.)

Contact : (Off.) 86077-70160, 0180-3510205 (Env.) 86077-70164, (BM) 86077-70166, (Food) 86077-70169

Web Site : www.haryanatesthouse.net, e-mail : haryanatesthousees@gmail.com, info@haryanatesthouse.net



TC-7811



Recognition / Approval : MoEF / FSSAI / BIS / ISO 9001, 14001, 45001 Certified Lab.

TEST REPORT

Issued To: Crystal Crop. Protection Ltd., (Unit- Technical Plant) Village & PO Nathupur, Sonapat (HR)	Report No. : HTH/EP/220804004 ULR No. : TC781122100004495F Party's Ref No. : Nil Booking Date : 04/08/2022 Period of Testing : 04/08/2022 To 09/08/2022 Reporting Date : 09/08/2022
---	--

Sample Description	: Effluent Water Sample (ETP-Inlet)
--------------------	-------------------------------------

Type of Industry : Pesticide manufacturing
Sample type : Effluent Water Sample (ETP-Inlet)
Date of sampling : 04/08/2022
Date of receipt of sample : 04/08/2022
Sample Location : ETP-Inlet
Sample quantity : 2 Ltr.
Purpose of analysis : Monitoring
Sample collected/ supplied by : By our Lab. Representative

TEST RESULTS

S.N.	Test Parameters	Unit	Result	Test Method
Discipline : Chemical, Group : Waste Water				
1	Odour		Mild	IS 3025 (Part 5): 2018
2	pH		9.66	IS 3025 (Part 11): 1993
3	Total Suspended Solids	mg/L	62.0	IS 3025 (Part 17): 1984
4	Chemical Oxygen Demand(COD)	mg/L	200.0	IS 3025 (Part 58): 2006
5	Biochemical Oxygen Demand (BOD) 3 Days at 27°C	mg/L	36.0	IS 3025 (Part 44): 1993
6	Oil & Grease	mg/L	5.3	IS 3025 (Part 39): 2021

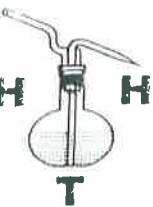
End of Report

[Handwritten signature]

Review by
09-8-22

[Handwritten signature]
9/08/22
Sr. Manager (Env.)

Page No.: 1 of 1



OC No. HTH/QF/7.8

HARYANA TEST HOUSE

& Consultancy Services

GOVT. RECOGNISED LABORATORY

50-C, Sector-25 Part-II, HUDA, PANIPAT-132 103 (HR.)

Contact : (OIL) 86077-70160, (180-3510205) (Env.) 86077-70164, (BM) 86077-70166, (Food) 86077-70169

Web Site : www.haryanatesthouse.net, e-mail : haryanatesthousecs@gmail.com, info@haryanatesthouse.net



TC-7811



Recognition / Approval : MoEF / FSSAI / BIS / ISO 9001, 14001, 45001 Certified Lab.

TEST REPORT

Issued To:

Crystal Crop. Protection Ltd.,

(Unit- Technical Plant) Village & PO Nathupur, Sonapat (HR)

Report No. : HTH/EP/220806038

ULR No. : TC781122100004528F

Party's Ref No. : Nil

Booking Date : 06/08/2022

Period of Testing : 06/08/2022 To 11/08/2022

Reporting Date : 11/08/2022

Sample Description : Noise Level Monitoring- DG Noise

Type of Industry : Pesticides Industry
Sample Location : DG 380 KVA
Instrument used : Sound Level Meter (HTH 1172)
Instrument Calibration Status : Calibrated (upto 12.01.2023)
Date of measurement : 05/08/2022
Purpose of analysis : Monitoring
Sample collected/ supplied by : By our Lab. Representative

OBSERVATION

S.N.	Point of Measurement	I	II	III	IV	V	VI
Discipline - Chemical, Group - Atmospheric Pollution -							
1	1.0 m Away from DG Set (Acoustic Encloser Open)	101.2	99.8	100.9	102.3	98.2	97.6
2	1.0 m Away from DG Set (Acoustic Encloser Closed)	72.9	71.8	70.9	73.9	74.2	69.9

TEST RESULTS

S.N.	Point of Measurement	Noise Level (dB "A")		
		Lmin	Lmax	Leq
1	1.0 m Away from DG Set (Acoustic Encloser Open)	97.6	102.3	100.3
2	1.0 m Away from DG Set (Acoustic Encloser Closed)	69.9	74.2	72.5
	Insertion Loss			27.8*

End of Report

Remarks : At the time of measurement DG Sets were in operation.

* As per EPA 1986, Insertion loss should be 25 dB (A) (min.) on acoustic enclosure and acoustic treatment for stationary DG Sets.

Md. Asif Akbari
Sr. Manager (Env.)Kimh
11.08.2022

Review by

Page No.: 1 of 1



DOC No. HTH/QF/7.8

HARYANA TEST HOUSE

& Consultancy Services

GOVT. RECOGNISED LABORATORY

50-C, Sector-25 Part-II, HUDA, PANIPAT-132 103 (HR.)

Contact : (Off) 86077-70160, 0180-3510205 (Env.) 86077-70164, (BM) 86077-70166, (Food) 86077-70169
Web Site : www.haryanatesthouse.net, e-mail : haryanatesthousecsa@gmail.com, info@haryanatesthouse.net



TC-7811



Recognition / Approval : MoEF / FSSAI / BIS / ISO 9001, 14001, 45001 Certified Lab.

TEST REPORT

Issued To: Crystal Crop. Protection Ltd., (Unit- Technical Plant) Village & PO Nathupur, Sonapat (HR)	Report No. : HTH/EP/220806035 ULR No. : TC781122100004539F Party's Ref No. : Nil Booking Date : 06/08/2022 Period of Testing : 06/08/2022 To 16/08/2022 Reporting Date : 16/08/2022
Sample Description : Ambient Air Quality Monitoring	

Type of Industry : Pesticide manufacturing
Date & time of sampling : 04/08/2022 (10:00 Hrs) to 05/08/2022 (10:00 Hrs)
Sample Location : Near ETP Area Gate No.5
Instrument used : RDS Model APM- 460 (Sr. No. 2493 DTB 2019)
Instrument Calibration Status : Calibrated (upto 08.04.2023)
Purpose of analysis : Monitoring
Sample collected/supplied by : By our Lab. Representative

A. Observations:

1. Sampling flow rate (Avg.) : 1.25 m3/min
2. Total volume of air sampled : 1800.00 m3
3. Period of sampling : 24 Hrs

S.N.	Test Parameters	Units	Result	Standard Limits (NAAQS)	Test Method
Discipline - Chemical, Group - Atmospheric Pollution					
1	Particulate Matter (PM10)	µg/ m3	83.44	100 max	IS 5182 (Part-23) : 2006
2	Particulate Matter (PM 2.5)	µg/ m3	42.50	60 max	IS 5182 (Part-24) : 2019
3	Sulphur Dioxide (SO2)	µg/ m3	16.42	80 max	IS 5182 (Part-2) : 2001
4	Nitrogen Dioxide (NO2)	µg/ m3	36.27	80 max	IS 5182 (Part-6) : 2006
5	Ammonia (NH3)	µg/ m3	44.72	400 max	IS 5182 (Part-25) : 2018
6	Ozone (O3)	µg/ m3	21.93	100 max	IS 5182 (Part-9) : 1974
7	Carbon Monoxide (CO)	mg/ m3	0.344	4 max	IS 5182 (Part-10) : 1999
8	Benzene (C6H6)	µg/ m3	BLQ(LOQ:0.52)	5 max	IS 5182 (Part-11) : 2006
9	Benzo - Pyrene (BaP)	ng/ m3	BLQ(LOQ:0.1)	1 max	IS 5182 (Part-12) : 2004
10	Lead (Pb)	µg/ m3	BLQ(LOQ:0.02)	1 max	IS 5182 (Part-22) : 2004
11	Nickel (Ni)	ng/ m3	BLQ(LOQ:2)	20 max	HTH/QF/7.2/2/ICP-01 SOP No 17
12	Arsenic (As)	ng/ m3	BLQ(LOQ:1)	6 max	HTH/QF/7.2/2/ICP-01 SOP No 17

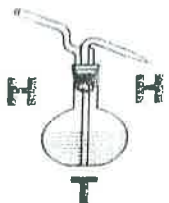
End of Report

Remarks : Standard limits are as per CPCB notification Nov. 2009

BLQ : Below limit of Quantification / LOQ : Limit of Quantification

Shobhit
16.8.22
Review by

Auth. Sign
DL
Md. Asfak Ansari
Sr. Manager (Env.)



DOC No. HTH/QF/7.8

HARYANA TEST HOUSE

& Consultancy Services

GOVT. RECOGNISED LABORATORY

50-C, Sector-25 Part-II, HUDA, PANIPAT-132 103 (HR.)

Contact : (O/H) 86077-70160, (I/nv.) 86077-70164, (B/M) 86077-70166, (Food) 86077-70169
Web Site : www.haryanatesthouse.net, e-mail : haryanatesthousecs@gmail.com, info@haryanatesthouse.net

TC-7811



Recognition / Approval : MoEF / FSSAI / BIS / ISO 9001, 14001, 45001 Certified Lab.

TEST REPORT

Issued To: Crystal Crop. Protection Ltd., (Unit- Technical Plant) Village & PO Nathupur, Sonapat (HR)	Report No. : HTH/EP/220806036 ULR No. : TC781122100004540F Party's Ref No. : Nil Booking Date : 06/08/2022 Period of Testing : 06/08/2022 To 16/08/2022 Reporting Date : 16/08/2022
Sample Description : Ambient Air Quality Monitoring	

Type of Industry : Pesticide manufacturing
Date & time of sampling : 04/08/2022 (10:00 Hrs) to 05/08/2022 (10:00 Hrs)
Sample Location : Near Boiler Area
Instrument used : RDS Model APM- 460 (Sr. No. 2494 DTB 2019)
Instrument Calibration Status : Calibrated (upto 08.04.2023)
Purpose of analysis : Monitoring
Sample collected/ supplied by : By our Lab. Representative

A. Observations:
1. Sampling flow rate (Avg.) : 1.21 m³/min
2. Total volume of air sampled : 1735.20 m³
3. Period of sampling : 24 Hrs

S.N.	Test Parameters	Units	Result	Standard Limits (NAAQS)	Test Method
Discipline - Chemical, Group - Atmospheric Pollution					
1	Particulate Matter (PM10)	µg/ m ³	88.29	100 max	IS 5182 (Part-23) : 2006
2	Particulate Matter (PM 2.5)	µg/ m ³	46.67	60 max	IS 5182 (Part-24) : 2019
3	Sulphur Dioxide (SO ₂)	µg/ m ³	19.19	80 max	IS 5182 (Part-2) : 2001
4	Nitrogen Dioxide (NO ₂)	µg/ m ³	37.49	80 max	IS 5182 (Part-6) : 2006
5	Ammonia (NH ₃)	µg/ m ³	45.09	400 max	IS 5182 (Part-25) : 2018
6	Ozone (O ₃)	µg/ m ³	22.30	100 max	IS 5182 (Part-9) : 1974
7	Carbon Monoxide (CO)	mg/ m ³	0.458	4 max	IS 5182 (Part-10) : 1999
8	Benzene (C ₆ H ₆)	µg/ m ³	BLQ(LOQ:0.52)	5 max	IS 5182 (Part-11) : 2006
9	Benzo - Pyrene (BaP)	ng/ m ³	BLQ(LOQ:0.1)	1 max	IS 5182 (Part-12) : 2004
10	Lead (Pb)	µg/ m ³	BLQ(LOQ:0.02)	1 max	IS 5182 (Part-22) : 2004
11	Nickel (Ni)	ng/ m ³	BLQ(LOQ:2)	20 max	HTH/QF/7.2/2/ICP-01 SOP No 17
12	Arsenic (As)	ng/ m ³	BLQ(LOQ:1)	6 max	HTH/QF/7.2/2/ICP-01 SOP No 17

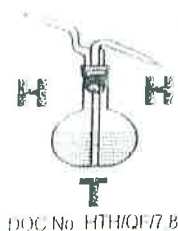
End of Report

Remarks : Standard limits are as per CPCB notification Nov. 2009

BLQ : Below limit of Quantification / LOQ : Limit of Quantification

hobbit
Review by 16.8.22.

Auth. Sign
Md. Asfak Ansari
Sr. Manager (Env.)



HARYANA TEST HOUSE

& Consultancy Services

GOVT. RECOGNISED LABORATORY

50-C, Sector-25 Part-II, HUDA, PANIPAT-132 103 (HR.)

Contact : (PH) 86077 70160, 0180 3510205 (Fax) 86077 70162, (BM) 86077 70166, (Food) 86077 70169

Web Site : www.haryanatesthouse.net, e-mail : haryanatesthousecs@gmail.com, info@haryanatesthouse.net



TC-7811



Recognition / Approval : MoEF / FSSAI / BIS / ISO 9001, 14001, 45001 Certified Lab.

TEST REPORT

Issued To:

Crystal Crop. Protection Ltd.,

-(Unit- Technical Plant) Village & PO Nathupur, Sonapat (HR)

Report No. : HTH/EP/221017020

ULR No. : TC781122100005985F

Party's Ref No. : Nil

Booking Date : 17/10/2022

Period of Testing : 17/10/2022 To 20/10/2022

Reporting Date : 20/10/2022

Sample Description : Ambient Air Quality Monitoring

Type of Industry : Pesticide manufacturing
Date & time of sampling : 15/10/2022 (10:00 Hrs) to 16/10/2022 (10:00 Hrs)
Sample Location : Near Village Nathupura
Instrument used : RDS Model APM- 460 BL (Sr. No. 3045 DTD 2017)
Instrument Calibration Status : Calibrated (upto 06.07.2023)
Purpose of analysis : Monitoring
Sample collected/ supplied by : By our Lab. Representative

A. Observations:

1. Sampling flow rate (Avg.) : 1.22 m³/min
2. Total volume of air sampled : 1610.40 m³
3. Period of sampling : 24 Hrs

S.N.	Test Parameters	Units	Result	Standard Limits (NAAQS)	Test Method
Discipline - Chemical, Group - Atmospheric Pollution					
1	Particulate Matter (PM10)	µg/ m ³	80.66	100 max	IS 5182 (Part-23) : 2006
2	Particulate Matter (PM 2.5)	µg/ m ³	38.18	60 max	IS 5182 (Part-24) : 2019
3	Sulphur Dioxide (SO ₂)	µg/ m ³	15.45	80 max	IS 5182 (Part-2) : 2001
4	Nitrogen Dioxide (NO ₂)	µg/ m ³	38.25	80 max	IS 5182 (Part-6) : 2006
5	Ammonia (NH ₃)	µg/ m ³	47.57	400 max	IS 5182 (Part-25) : 2018
6	Ozone (O ₃)	µg/ m ³	21.87	100 max	IS 5182 (Part-9) : 1974
7	Carbon Monoxide (CO)	mg/ m ³	0.229	4 max	IS 5182 (Part-10) : 1999
8	Benzene (C ₆ H ₆)	µg/ m ³	BLQ (LOQ-0.52)	5 max	IS 5182 (Part-11) : 2006
9	Benzo - Pyrene (BaP)	ng/ m ³	BLQ (LOQ-0.1)	1 max	IS 5182 (Part-12) : 2004
10	Lead (Pb)	µg/ m ³	BLQ (LOQ-0.02)	1 max	IS 5182 (Part-22) : 2004
11	Nickel (Ni)	ng/ m ³	BLQ (LOQ:2)	20 max	HTH/QF/7.2/2/ICP-01 SOP No 17
12	Arsenic (As)	ng/ m ³	BLQ (LOQ:1)	6 max	HTH/QF/7.2/2/ICP-01 SOP No 17

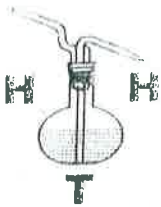
End of Report

Remarks : Standard limits are as per CPCB notification Nov. 2009

BLQ : Below limit of Quantification / LOQ : Limit of Quantification

Signature: [Signature]
Date: 20/10/22

Signature: [Signature]
Date: 20/10/22
Md. Asif Ansari
Sr. Manager (Env.)



HARYANA TEST HOUSE

& Consultancy Services

GOVT. RECOGNISED LABORATORY

58-C, Sector-25 Part-II, HUDA, PANIPAT-132 103 (HR.)

Contact : (Off.) 860777 70160, 0180-3510205 (Inv.) 860777 70164, (BM) 860777 70166, (Food) 860777 70169
Web Site : www.haryanatesthouse.net, e-mail : haryanatesthousees@gmail.com, info@haryanatesthouse.net



TC-7811



Recognition / Approval : MoEF / FSSAI / BIS / ISO 9001, 14001, 45001 Certified Lab.

TEST REPORT

Issued To:

Crystal Crop. Protection Ltd.,
(Unit- Technical Plant) Village & PO Nathupur, Sonapat (HR)

Report No. : HTH/EP/221017021

ULR No. : TC781122100005986F

Party's Ref No. : Nil

Booking Date : 17/10/2022

Period of Testing : 17/10/2022 To 20/10/2022

Reporting Date : 20/10/2022

Sample Description : Ambient Air Quality Monitoring

Type of Industry : Pesticide manufacturing
Date & time of sampling : 15/10/2022 (10:00 Hrs) to 16/10/2022 (10:00 Hrs)
Sample Location : Near Village Rasol
Instrument used : RDS Model APM- 460 BL (Sr. No. 2304 DTB 2018)
Instrument Calibration Status : Calibrated (upto 08.04.2023)
Purpose of analysis : Monitoring
Sample collected/ supplied by : By our Lab. Representative

A. Observations:

1. Sampling flow rate (Avg.) : 1.19 m³/min
2. Total volume of air sampled : 1577.94 m³
3. Period of sampling : 24 Hrs

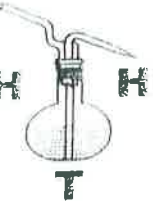
S.N.	Test Parameters	Units	Result	Standard Limits (NAAQS)	Test Method
Discipline - Chemical, Group - Atmospheric Pollution					
1	Particulate Matter (PM10)	µg/ m ³	78.14	100 max	IS 5182 (Part-23) : 2006
2	Particulate Matter (PM 2.5)	µg/ m ³	36.36	60 max	IS 5182 (Part-24) : 2019
3	Sulphur Dioxide (SO ₂)	µg/ m ³	14.29	80 max	IS 5182 (Part-2) : 2001
4	Nitrogen Dioxide (NO ₂)	µg/ m ³	32.20	80 max	IS 5182 (Part-6) : 2006
5	Ammonia (NH ₃)	µg/ m ³	43.13	400 max	IS 5182 (Part-25) : 2018
6	Ozone (O ₃)	µg/ m ³	21.45	100 max	IS 5182 (Part-9) : 1974
7	Carbon Monoxide (CO)	mg/ m ³	0.229	4 max	IS 5182 (Part-10) : 1999
8	Benzene (C ₆ H ₆)	µg/ m ³	BLQ (LOQ-0.52)	5 max	IS 5182 (Part-11) : 2006
9	Benzo - Pyrene (BaP)	ng/ m ³	BLQ (LOQ-0.1)	1 max	IS 5182 (Part-12) : 2004
10	Lead (Pb)	µg/ m ³	BLQ (LOQ-0.02)	1 max	IS 5182 (Part-22) : 2004
11	Nickel (Ni)	ng/ m ³	BLQ (LOQ:2)	20 max	HTH/QF/7.2/2/ICP-01 SOP No 17
12	Arsenic (As)	ng/ m ³	BLQ (LOQ:1)	6 max	HTH/QF/7.2/2/ICP-01 SOP No 17

End of Report

Remarks : Standard limits are as per CPCB notification Nov. 2009

BLQ : Below Limit of Quantification / LOQ : Limit of Quantification

Md. Asif Ansari
Sr. Manager (Env.)



HARYANA TEST HOUSE

& Consultancy Services

GOVT. RECOGNISED LABORATORY

50-C, Sector-25 Part-II, HUDA, PANIPAT-132 103 (HR.)

Contact : (Off) 86077-70160, 0180-3510205 (Env.) 86077-70164, (BM) 86077-70166, (Food) 86077-70169
Web Site : www.haryanatesthouse.net, e-mail : haryanatesthouse@gmail.com, info@haryanatesthouse.net



Recognition / Approval : MoEF / FSSAI / BIS / ISO 9001, 14001, 45001 Certified Lab.

TEST REPORT

Issued To:

Crystal Crop. Protection Ltd.,

(Unit- Technical Plant) Village & PO Nathupur, Sonapat (HR)

Report No. : HTH/EP/220806027

ULR No. : TC781122100004571F

Party's Ref No. : Nil

Booking Date : 06/08/2022

Period of Testing : 06/08/2022 To 13/08/2022

Reporting Date : 13/08/2022

Sample Description	: Stack Emission (DG 380 KVA)
Type of Industry	: Pesticide manufacturing
Name of Plant/ Section	: DG Section
Date of sampling	: 05/08/2022
Capacity of DG	: 380 KVA
Source of Emission	: Stack Attached to DG
Instrument used	: Stack Sampler APM 160 (Sr.No. 88 DTL 2016)
Instrument Calibration Status	: Calibrated (upto 24.12.2022)
Type of stack	: Metal
Type of Fuel used	: HSD
Stack height (from the ground level)	: 6 meter
Stack diameter (at the sampling point)	: 6 Inch
Sample Location	: As per standard norms
Purpose of sampling	: Monitoring
Sample collected by	: By our lab representative

A Observations

1. Stack gas temperature, °C	: 231.0
2. Temperature at Metering point, °C	: 32.0
3. Avg. stack gas velocity, m/sec	: 16.95
4. Sampling flow rate, Lt./min.	: 19.0
5. Period of sampling, Minutes	: 30.0
6. Volumetric flow rate, Nm ³ / Hr	: 632.41

B Results

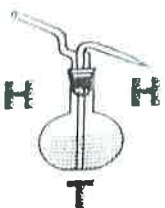
S.N.	Test Parameters	Units	Result	Standard Limit	Test Method
Discipline: Chemical, Group: Atmospheric Pollution					
1	Particulate Matter (PM)	gm/kwh	0.13	0.20 Max	IS 11255 (Part-I) : 1985
2	Nitrogen Dioxide (NO _x)	gm/kwh	1.04	--	HTH/QF/7.2/2/CH-02, SOP No-23
3	Carbon Monoxide (CO)	gm/kwh	0.24	3.50 Max	HTH/QF/7.2/2/CH-02, SOP No-23
4	Total Hydrocarbon (HC)	gm/kwh	0.04	--	HTH/QF/7.2/2/CH-02, SOP No-25
5	Nitrogen Dioxide + Total Hydrocarbon (NO _x + HC)	gm/kwh	1.08	4.0 Max	HTH/QF/7.2/2/CH-02, SOP No-25

End of Report

Review by

13.8.22

Md. Asfak Ansari
Sr. Manager (Env.)



DOC No. HTH/QF/7.8

HARYANA TEST HOUSE

& Consultancy Services

GOVT. RECOGNISED LABORATORY

50-C, Sector-25 Part-II, HUDA, PANIPAT-132 103 (HR.)

Contact : (Off.) 86077-70160, 0180-3510205 (Env.) 86077-70164, (BM) 86077-70166, (Food) 86077-70169
Web Site : www.haryanatesthouse.net. e-mail : haryanatesthousecs@gmail.com, info@haryanatesthouse.net



TC-7811



Recognition / Approval : MoEF / FSSAI / BIS / ISO 9001, 14001, 45001 Certified Lab.

TEST REPORT

Issued To:

Crystal Crop. Protection Ltd.,

(Unit- Technical Plant) Village & PO Nathupur, Sonapat (HR)

Report No. : HTH/EP/220813072

ULR No. : TC781122100004740F

Party's Ref No. : Nil

Booking Date : 13/08/2022

Period of Testing : 13/08/2022 To 20/08/2022

Reporting Date : 20/08/2022

Sample Description : Stack Emission (Process)
Type of Industry : Pesticide manufacturing
Name of Plant/ Section : Scrubber Section
Date of sampling : 13/08/2022
Source of Emission : Scrubber Section
Instrument used : Stack Sampler VSS1 (Sr.No. 247 DTK 2019)
Instrument Calibration Status : Calibrated (upto 24.12.2022)
Type of Chimney : Metal HDPE42.0
Type of Fuel used : Not Specified
Stack height (from the ground level) : 12 meter
Stack diameter (at the sampling point) : 150 mm
Sample Location : As per standard norms
Purpose of sampling : Monitoring
Sample collected by : By our lab representative

A Observations

1. Stack gas temperature, °C : 123.0
2. Temperature at Metering point, °C : 37.0
3. Avg. stack gas velocity, m/sec : 6.87
4. Sampling flow rate, Lt./min. : 23.0
5. Period of sampling, Minutes : 30.0
6. Volumetric flow rate, Nm³/ Hr : 31603.61

B Results

S.N.	Test Parameters	Units	Result	Standard Limit	Test Method
Discipline: Chemical, Group: Atmospheric Pollution					
1	Particulate Matter (PM)	mg/Nm ³	25.31	150 Mac	IS 11255 (Part-I) : 1985
2	Sulphur Dioxide (SO ₂)	mg/Nm ³	BLQ (LOQ:3.0)	-	HTH/QF/7.2/2/CH-02, SOP No-23
3	Nitrogen Dioxide (NO ₂)	mg/Nm ³	BLQ (LOQ:3.0)	-	HTH/QF/7.2/2/CH-02, SOP No-23

End of Report

Remarks : BLQ : Below limit of Quantification / LOQ : Limit of Quantification

Review by
20-8-22





HARYANA TEST HOUSE

& Consultancy Services

GOVT. RECOGNISED LABORATORY

50-C, Sector-25 Part-II, HUDA, PANIPAT-132 103 (HR.)

Contact : (Off.) 86077-70160, 0180-3510205 (Env.) 86077-70164, (BM) 86077-70166, (Food) 86077-70169
Web Site : www.haryanatesthouse.net, e-mail : haryanatesthousecs@gmail.com, info@haryanatesthouse.net



TC-7811



Recognition / Approval : MoEF / FSSAI / BIS / ISO 9001, 14001, 45001 Certified Lab.

TEST REPORT

Issued To:

Crystal Crop. Protection Ltd.,

(Unit- Technical Plant) Village & PO Nathupur, Sonapat (HR)

Report No. : HTH/EP/220806029

ULR No. : TC781122100004573F

Party's Ref No. : Nil

Booking Date : 06/08/2022

Period of Testing : 06/08/2022 To 13/08/2022

Reporting Date : 13/08/2022

Sample Description : Stack Emission (Incinerator)
Type of Industry : Pesticide manufacturing
Name of Plant/ Section : Incinerator Section
Date of sampling : 05/08/2022
Source of Emission : Stack Attached to Incinerator
Instrument used : Stack Sampler APM 160 (Sr.No. 88 DTL 2016)
Instrument Calibration Status : Calibrated (upto 24.12.2022)
Type of Chimney : Metal
Type of Fuel used : HSD
Stack height (from the ground level) : 30 meter
Stack diameter (at the sampling point) : 300 mm
Sample Location : As per standard norms
Purpose of sampling : Monitoring
Sample collected by : By our lab representative

A Observations

1. Stack gas temperature, °C : 155.0
2. Temperature at Metering point, °C : 34.0
3. Avg. stack gas velocity, m/sec : 7.58
4. Sampling flow rate, Lt./min. : 23.0
5. Period of sampling, Minutes : 40.0
6. Volumetric flow rate, Nm³/ Hr : 1307.47

B Results

S.N.	Test Parameters	Units	Results	Standard Limit	Test Method
Discipline: Chemical, Group: Atmospheric Pollution					
1	Particulate Matter (PM)	mg/Nm ³	36.48	50 Max	IS 11255 (Part-I) : 1985
2	Sulphur Dioxide (SO ₂)	mg/Nm ³	13.09	200 Max	HTH/QF/7.2/2/CH-02, SOP No-23
3	Nitrogen Dioxide (NO ₂)	mg/Nm ³	142.99	400 Max	HTH/QF/7.2/2/CH-02, SOP No-23
4	Carbon Monoxide (CO)	mg/Nm ³	86.54	100 Max	HTH/QF/7.2/2/CH-02, SOP No-23
5	Oxygen (O ₂)	%	13.90	--	HTH/QF/7.2/2/CH-02, SOP No-23

End of Report

Remarks : Particulate Matter Corrected @11 % O₂

Chobhil
13.8.22
Review by

HARYANA TEST HOUSE
Auth. Sign.
Or.
Md. Asif Ansari
Sr. Manager (Env.)



DOC No. HTH/QF/7 B

HARYANA TEST HOUSE

& Consultancy Services**GOVT. RECOGNISED LABORATORY**

50-C, Sector-25 Part-II, HUDA, PANIPAT-132 103 (HR.)

Contact : (Off.) 86077-70160, 0180-3510205 (Env.) 86077-70164, (HM) 86077-70166, (Food) 86077-70169

Web Site : www.haryanatesthouse.net, e-mail : haryanatesthouse@yahoo.com, info@haryanatesthouse.net

**Recognition/Approval: MoEF / FSSAI / BIS / ISO 9001, 14001, 45001 Certified Lab.**

TEST REPORT

Issued To:

Crystal Crop. Protection Ltd.,

(Unit- Technical Plant) Village & PO Nathupur, Sonapat (HR)

Report No.

: HTH/M/220816001

Party's Ref No.

: Nil

Booking Date

: 16/08/2022

Period of Testing

: 16/08/2022 To 24/08/2022

Reporting Date

: 24/08/2022

Sample Description : Stack Emission (2 TPH)
Type of Industry : Pesticide Manufacturing
Name of Plant/ Section : Boiler Section
Date of sampling : 16/08/2022
Capacity of Boiler : 2 TPH
Source of Emission : Stack attached to Boiler
Instrument used : Stack Sampler APM 160 (Sr.No. 87 DTL 2016)
Instrument Calibration Status : Calibrated (upto 23.12.2022)
Type of stack : Metal
Type of Fuel used : Wood
Stack height (from the ground level) : 30 meter
Stack diameter (at the sampling point) : 0.55 meter
Sample Location : As Per Standard Norms
Purpose of sampling : Monitoring
Sample collected by : By our Lab. Representative
Type of APCM : Cyclone Separator

A Observations
1. Stack gas temperature, °C : 134.0
2. Temperature at Metering point, °C : 88.0
3. Avg. stack gas velocity, m/sec : 7.89
4. Sampling flow rate, Lt./min. : 26.0
5. Period of sampling, Minutes : 30.0
6. Volumetric flow rate, Nm³/Hr : 4736.25

B Results

S.N.	Test Parameters	Units	Result	Standard Limit	Test Method
Discipline: Chemical, Group: Atmospheric Pollution					
1	Particulate Matter (PM)	mg/Nm ³	68.56	1200 Max	IS 11255 (Part-I) : 1985
2	Sulphur Dioxide (SO ₂)	mg/Nm ³	18.34	-	HTH/QF/7.2/2/CH-02, SOP No-23
3	Nitrogen Dioxide (NO ₂)	mg/Nm ³	22.56	-	HTH/QF/7.2/2/CH-02, SOP No-23
4	Carbon Dioxide (CO ₂)	% v/v	7.90	-	HTH/QF/7.2/2/CH-02, SOP No-23

End of Report

Remarks : Particulate Matter Corrected @ 12 % Carbon Dioxide (CO₂)

Review by a 22

*Annexure-11 Copy of Latest Environmental Statement Submitted
on Form - V*
December 2022 Compliance Report





To,
The Regional Officer,
Haryana State Pollution Control Board,
Star Complex, Opp. General Hospital,
Delhi Road, Sonapat (Haryana)

Subject: Submission of Environment Statement for the year 2021-22 in Form-V.

Dear Sir,

We are submitting here with environment statement of our industry for the year 2021-22 in prescribed FORM-V along with necessary Annexure.

Hope your goodness will find everything in order.

Thanking You,

Yours Truly

For CRYSTAL CROP PROTECTION LTD

(Unit - Technical Plant)

Authorized Signatory

Enclosures: Environment Statement of our Industry for 2021-22 along with Annexure -1, 2,3,4,5,6



Crystal Crop Protection Limited

(Formerly known as Crystal Crop Protection Pvt Ltd)

Works Address: V.P.O. Nathupur, Sonapat-131029, Haryana | Tel: +91-130-2219286, 91-130-2219289,

Corporate Address: B-95, Wazirpur Industrial Area, Wazirpur, Delhi - 110052, India | Tel: +91-11-49007100, +91-11-27006800 | Fax: +91-11-49007200,

Registered Address: 206, Second Floor, Span Trade Centre, Opp Kochrab Gandhi Ashram, Near Paldi Char Raasta Ashram Road,

Ellisbridge, Ahmedabad - 380006, Gujarat | Tel & Fax +91-79-26578923

CIN: U01403GJ1994PLC097033 | info@crystalcrop.com | www.crystalcropprotection.com

[FORM - VI]

(See rule 14)

Environmental Statement for the financial year ending the 31st March 2022

PART - A

- (i) Name and address of the owner/occupier of the industry operation or process.

M/s Crystal Crop Protection Ltd
VPO: Nathupur, Distt: Sonapat, HARYANA

- (ii) Industry category Primary ----(STC code) Secondary,----- (SIC Code)
"Pesticide Manufacturing Industry"

- (iii) Production capacity. 21 MTPD

Product wise actual Production data		
Name of Product	Quantity manufactured during previous financial year in Kg.	Quantity manufactured during current financial year in Kg.
Clodinafop-Propargyl	89850	94600
Quizalofop-Ethyl	5650	40750
Penoxsulam	2828	2450
Pretilachlor	537350	393600
Cloquintocet mexyl	20050	52125
Bispyribac sodium	--	513
Tebuconazole	--	520

- (iv) Year of establishment - 2014

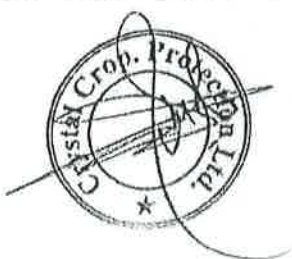
- (v) Date of the last environmental statement submitted
21-09-2021

PART - B

Water and Raw Material Consumption

- (1) Water consumption m3/d:

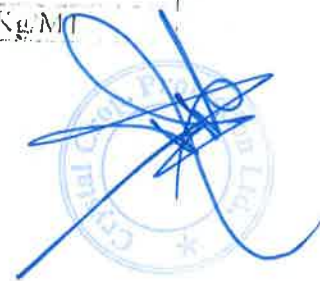
Consumed	Fresh	Recycled	Total
Process	3 M3/ d	12 M3/ d	15 M3/ d
Cooling	7 M3/ d	8 M3/ d	15 M3/ d
Domestic	2 M3/ d	--	2 M3/ d



Name of Products	Process Water Consumption Per Unit of Product	
	During previous Financial Year (KL/MT)	During the current Financial Year (KL/MT)
Clodinafop-Propargyl	2.0	2.0
Quizalofop-Ethyl	0.5	0.5
Penoxsulam	0.5	0.5
Pretilachlor	2	2
Cloquintocet mexyl	2	2
Bispyribac sodium	--	11
Tebuconazole	--	0.875

ii) **Raw Material Consumption**

Name of Raw Materials	Name of Products	Consumption of Raw Materials Per Unit of Product	
		During the Previous Financial Year	During the Current Financial Year
R-Hydroxy (Phenoxy) Propionic Acid	Clodinafop-Propargyl	610 Kg/MT	610 Kg/MT
5-Chloro-2,3-difluoro pyridine		530 Kg/MT	530 Kg/MT
Potassium Carbonate		990 Kg/MT	990 Kg/MT
Propargyl Chloride		410 Kg/MT	410 Kg/MT
Dimethylformamide		750 Kg/MT	750 Kg/MT
Methanol	Quizalofop-Ethyl	450 Kg/MT	450 Kg/MT
(R)-Ethyl Hydroxy (Phenoxy) Propanoate		641 Kg/MT	641 Kg/MT
2,6-Dichloro Quinoxaline		584 Kg/MT	584 Kg/MT
Potassium Carbonate		411 Kg/MT	411 Kg/MT
Dimethylformamide		300 Kg/MT	300 Kg/MT
Hexane/Toluene		100 Kg/MT	100 Kg/MT
Methanol		600 Kg/MT	600 Kg/MT
Diethyl propoxy ethyl aniline	Pretilachlor	765 Kg/MT	765 Kg/MT
Chloro acetyl chloride		400 Kg/MT	400 Kg/MT
Sodium bicarbonate	Penoxsulam	335 Kg/MT	335 Kg/MT
2,2-Difluoroethoxy		700 Kg/MT	700 Kg/MT
6trifluoro methyl Ben		300 Kg/MT	300 Kg/MT
5,8-Dimethoxy 1,2,4triazolo[1,5C] Pyrimidin		400 Kg/MT	400 Kg/MT
3,5 Luridine			



Methanol	Cloquintocet mexyl	360 Kg/MT	60 Kg/MT
3-Chloro-8-hydroxy quinoline		670 Kg/MT	620 Kg/MT
2-Heptanol		430 Kg/MT	430 Kg/MT
Dimethyleformaide		500 Kg/MT	500 Kg/MT
Mono-Chloro acetic acid		400 Kg/MT	400 Kg/MT
N-Hexane		400 Kg/MT	400 Kg/MT
Potassium carbonate		366 Kg/MT	366 Kg/MT
Para toluene sulphuric acid		5 Kg/MT	5 Kg/MT
Toluene		260 Kg/MT	260 Kg/MT
2,6-di hydroxyl benzoic acid		--	398 Kg/MT
Toluene	Bispyribac sodium	--	400 Kg/MT
Di methyl formamide		--	580 Kg/MT
2-Methyl sulfonyl-4,- 6dimethoxy pyrimidine		--	1377.5 Kg/MT
Potassium carbonate		--	1070 Kg/MT
Hydro chloric acid		--	380 Kg/MT
Caustic soda (flakes)		--	260 Kg/MT
Methanol		--	1930 Kg/MT
1-4-ChloroPH -4dimethyl 2pent-3one98.5%	Tebuconazole	--	961.5 Kg/MT
Dimethyl sulfide		--	461 Kg/MT
Dimethyl sulphate		--	817.3 Kg/MT
Potassium hydroxide		--	759.6 Kg/MT
Toluene		--	384 Kg/MT
Hydrochloric acid		--	96.1 Kg/MT
1H-1,2,4-Triazole		--	288.4 Kg/MT
N-butyl alcohol		--	60 Kg/MT
Cyclohexane		--	634 Kg/MT

*Industry may use codes if disclosing details of raw material would violate contractual obligations, otherwise all industries have to name the raw materials used.

PART - C

Pollution discharged to environment/unit of output
(Parameter as specified in the consent issued)

1) Pollutants	Quantity of pollutants discharged (mass/day)	Concentrations of pollutants in discharges (mass/volume)	Percentage of variation from prescribed standards with reasons
---------------	--	---	---



at Wast

No Effluent discharged recycled to the process, ZLD unit.

No water discharged however ETP inlet & outlet analysis report is as under

Parameter	ETP inlet result	ETP outlet result
Appearance	Light Yellow	Colorless
Odour	Mild	Oderless
pH	8.47	6.95
COD mg/l	175.0	22.0
Oil & Grease	5.6	BLQ(LOQ 0.5)
BOD at 27°C 3 Days mg/l	44.0	4.2
TSS mg/l	74.0	8.0

Within standard limits Report Attached (Annexure-1)

Air

Boiler Stack

Volumetric flow rate 4466.84 Nm³/Hr.

PM- 386.35 mg/m³
SO₂- 18.32 mg/m³
NO₂- 20.70 mg/m³
CO₂- 7.50 %v/v

Within standard limits Report Attached (Annexure-2)

Incinerator Stack

Volumetric flow rate 1412.99 Nm³/Hr.

PM- 39.34 mg/Nm³
SO₂- 13.09 mg/Nm³
NO₂- 146.75 mg/Nm³
CO- 79.02 mg/Nm³
O₂- 13.70%

Within standard limits Report Attached (Annexure-3)

Wet Scrubber

Volumetric flow rate 306.02 Nm³/Hr.

PM- 24.56 mg/m³
SO₂- BLQ(LOQ 3.0) mg/m³
NO₂- BLQ(LOQ 2.0) mg/m³

Within standard Limits Report Attached (Annexure-4)

DG Set(380 KVA)

Volumetric flow rate 546.97 Nm³/Hr.

PM- 0.14 gm/Kwh
NO_x- 0.60 gm/Kwh
CO- 0.11 gm/Kwh
HC- 0.04 gm/Kwh

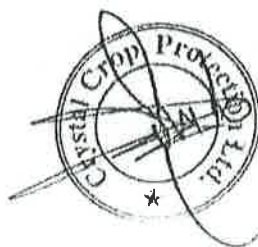
Within standard limits Report Attached (Annexure-5)

Ambient

Sampling flow rate 1.25 m³/min

PM₁₀- 91.22 ug/m³
PM_{2.5}- 49.17 ug/m³
SO₂- 19.97 ug/m³
NO₂- 34.93 ug/m³
NH₃- 49.64 ug/m³
O₃- 22.56 ug/m³
CO- 0.687 mg/m³
C₆H₆- BLQ(LOQ 0.52) ug/m³
BaP- BLQ(LOQ 0.1) ug/m³
Pb- BLQ(LOQ 0.02) ug/m³
Ni- BLQ(LOQ 2.0) ng/m³
As- BLQ(LOQ 1.0) ng/m³

Within standard limits Report Attached (Annexure-6)



[Handwritten signature]



HARYANA TEST HOUSE

& Consultancy Services

GOVT. RECOGNISED LABORATORY



50-C, Sector-25 Part-II, HUDA, PANIPAT-132 103 (HR.)
 Contact : (Off.) 86077-70160, 0180-3510205 (Env.) 86077-70164, (BM) 86077-70166, (Food) 86077-70169
 Web Site : www.haryanatesthouse.net, e-mail : haryanatesthousecs@gmail.com, info@haryanatesthouse.net

Recognition / Approval : MoEF / FSSAI / BIS / ISO 9001, 14001, 45001 Certified Lab.

TEST REPORT

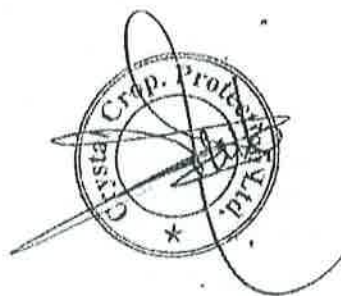
Issued To: CRYSTAL CROP. PROTECTION LTD Village Nathupur, Sonapat (HR)	Report No. : HTH/EP/211228012 ULR No. : TC781122100000022F Party's Ref No. : Nil Booking Date : 28/12/2021 Period of Testing : 28/12/2021 To 04/01/2022 Reporting Date : 04/01/2022
---	--

Sample Description	: Effluent Water Sample (ETP-Inlet)
Type of Industry	: Pesticide manufacturing
Sample type	: Effluent Water Sample (ETP-Inlet)
Date of sampling	: 28/12/2021
Date of receipt of sample	: 28/12/2021
Sample Location	: ETP-Inlet
Sample quantity	: 2 Ltr.
Purpose of analysis	: Monitoring
Sample collected/ supplied by	: By our Lab. Representative

TEST RESULTS

S.N.	Test Parameters	Unit	Result	Test Method
Discipline : Chemical, Group : Waste Water				
1	Odour	-	Mild	IS 3025 (Part 5): 2018
2	pH	-	8.47	IS 3025 (Part 11) 1993 RA: 2017
3	Total Suspended Solids	mg/L	74.0	IS 3025 (Part 17) 1984 RA: 2017
4	Chemical Oxygen Demand(COD)	mg/L	175.0	IS 3025 (Part 58) 2006 RA: 2017
5	Biochemical Oxygen Demand (BOD) 3 Days at 27°C	mg/L	44.0	IS 3025 (Part 44) 1993 RA: 2019
6	Oil & Grease	mg/L	5.6	IS 3025 (Part 39) 1991 RA: 2019

End of Report



Review by
 04-1-22

ML Sharma
 Dy. Manager (ENV.)



DOC No. HTH/QF/7.8

HARYANA TEST HOUSE

& Consultancy Services

GOVT. RECOGNISED LABORATORY

50-C, Sector-25 Part-II, HUDA, PANIPAT-132 103 (HR.)

Contact : (Off.) 86077-70160, 0180-3510205 (Env.) 86077-70164, (HM) 86077-70166, (Food) 86077-70169

Web Site : www.haryanatesthouse.net, e-mail : haryanatesthousees@gmail.com, info@haryanatesthouse.net

10-7811



Recognition / Approval : MoEF / FSSAI / BIS / ISO 9001, 14001, 45001 Certified Lab.

TEST REPORT

Issued To:

CRYSTAL CROP. PROTECTION LTD
Village Nathupur, Sonapat (HR)

Report No. : HTH/EP/211228013

ULR No. : TC781122100000023F

Party's Ref No. : Nil

Booking Date : 28/12/2021

Period of Testing : 28/12/2021 To 04/01/2022

Reporting Date : 04/01/2022

Sample Description : Effluent Water Sample (ETP-Outlet)

Type of Industry : Pesticide manufacturing

Sample type : Effluent Water Sample (ETP-Outlet)

Date of sampling : 28/12/2021

Date of receipt of sample : 28/12/2021

Sample Location : ETP-Outlet

Sample quantity : 2 Ltr.

Purpose of analysis : Monitoring

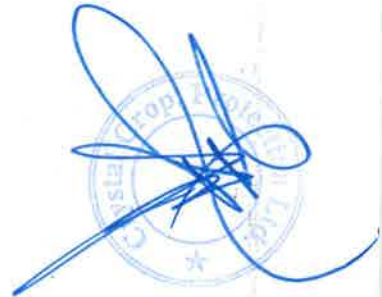
Sample collected/ supplied by : By our Lab. Representative

TEST RESULTS

S.N.	Test Parameters	Unit	Result	Limit as per EP Act, 1986 (Inland Surface Water)	Test Method
Discipline : Chemical, Group : Waste Water					
1	Odour		Odourless		IS 3025 (Part 5): 2018
2	pH		6.95	5.5 - 9.0	IS 3025 (Part 11) 1993 RA: 2017
3	Total Suspended Solids	mg/L	8.0	100 Max	IS 3025 (Part 17) 1984 RA: 2017
4	Chemical Oxygen Demand(COD)	mg/L	22.0	250 Max	IS 3025 (Part 58) 2006 RA: 2017
5	Biochemical Oxygen Demand (BOD) 3 Days at 27°C	mg/L	4.2	30 Max	IS 3025 (Part 44) 1993 RA: 2019
6	Oil & Grease	mg/L	BLQ(LOQ 0.5)	10 Max	IS 3025 (Part 39) 1991 RA: 2019

End of Report

Remarks : BLQ : Below limit of Quantification / LOQ : Limit of Quantification

ML Sharma
Dy. Manager (ENV.)

Page No. 10

Review by
04-1-22

NOTE

1. This report is not to be reproduced wholly or in part and cannot be used as an evidence in the court of law.
2. This report should not be used in any advertising media without our special permission in writing.
3. Sample will be destroyed after 7 days for Perishable Items & 30 days for non-perishable items from the date of issue of test report.
4. For results related to the test items only.



HARYANA TEST HOUSE

& Consultancy Services

GOVT. RECOGNISED LABORATORY

50-C, Sector-25 Part-II, HUDA, PANIPAT-132 103 (HR.)

Contact : (Off.) 86077-70160, 0180-3510205 (Env.) 86077-70164, (BM) 86077-70166, (Food) 86077-70169
Web Site : www.haryanatesthouse.net, e-mail : haryanatesthousecs@gmail.com, info@haryanatesthouse.net



Recognition / Approval : MoEF / FSSAI / BIS / ISO 9001, 14001, 45001 Certified Lab.

TEST REPORT

Issued To:

CRYSTAL CROP. PROTECTION LTD
Village Nathupur, Sonapat (HR)

Report No. : HTH/EP/211229005

ULR No. : TC781122100000014F

Party's Ref No. : Nil

Booking Date : 29/12/2021

Period of Testing : 29/12/2021 To 03/01/2022

Reporting Date : 03/01/2022

Sample Description : Stack Emission (Boiler)
Type of Industry : Pesticide manufacturing
Name of Plant/ Section : Boiler Section
Date of sampling : 29/12/2021
Capacity of Boiler : 2 TPH
Source of Emission : Stack Attached to Boiler
Instrument used : Stack Sampler VSS1 (Sr.No. 247 DTK 2019)
Instrument Calibration Status : Calibrated (upto 24.12.2022)
Type of stack : Metal
Type of Fuel used : Wood
Stack height (from the ground level) : 30 meter
Stack diameter (at the sampling point) : 0.55 meter
Sample Location : As per standard norms
Purpose of sampling : Monitoring
Sample collected by : By our lab representative
Type of APCM :

A Observations

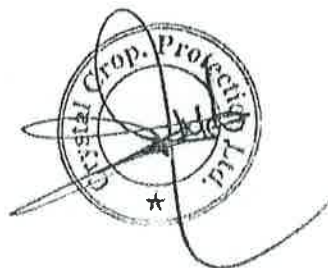
1. Stack gas temperature, °C : 130.0
2. Temperature at Metering point, °C : 18.0
3. Avg. stack gas velocity, m/sec : 7.35
4. Sampling flow rate, Lt./min. : 23.0
5. Period of sampling, Minutes : 30.0
6. Volumetric flow rate, Nm³/ Hr : 4466.84

B Results

S.N.	Test Parameters	Units	Result	Standard Limit	Test Method
Discipline: Chemical, Group: Atmospheric Pollution					
1	Particulate Matter (PM)	mg/m ³	386.35	800 Max	IS 11255 (Part-I) : 1985 : RA: 201
2	Sulphur Dioxide (SO ₂)	mg/m ³	18.32	-	HTH/QF/7.2/2/CH-02, SOP No-2
3	Nitrogen Dioxide (NO ₂)	mg/m ³	20.70	-	HTH/QF/7.2/2/CH-02, SOP No-2
4	Carbon Dioxide (CO ₂)	% v/v	7.50	-	HTH/QF/7.2/2/CH-02, SOP No-2

End of Report

Remarks : Particulate Matter Corrected @ 12 % Carbon Dioxide (CO₂)



ML Sharma
Dy. Manager (ENV.)

Reviewed by
3.1.22

Page No : 1 of 1

HARYANA TEST HOUSE

& Consultancy Services

GOVT. RECOGNISED LABORATORY

50-4, Sector-25 Part-II, HUDA, PANIPAT-132 103 (HR.)

Contact : (CH) 86077 20160, (L) 86077 20160, (Fax) 86077 20160, (Email) 86077 20160
Web Site : www.haryanatesthouse.net, e-mail : haryanatesthouse@gmail.com, info@haryanatesthouse.net

IC 7811



Recognition / Approval : MoEF / FSSAI / BIS / ISO 9001, 14001, 45001 Certified Lab.

TEST REPORT

Reported To	Report No.
CRYSTAL CROP PROTECTION LTD	HTH/EP/210731004
Village Nathupur, Sonapat (HR)	ULR No.
	TC781121100000903F
	Party's Ref No.
	Nil
	Booking Date
	31/07/2021
	Period of Testing
	31/07/2021 To 06/08/2021
	Reporting Date
	06/08/2021

Sample Description	: Stack Emission (Incinerator)
Type of Industry	: Pesticide manufacturing
Name of Plant/ Section	: Incinerator Section
Date of sampling	: 31/07/2021
Source of Emission	: Stack Attached to Incinerator
Instrument used	: Stack Sampler VSS1 (Sr.No. 247 DTK 2019)
Instrument Calibration Status	: Calibrated (upto 28.12.2021)
Type of Chimney	: Metal
Type of Fuel used	: HSD
Stack height (from the ground level)	: 30 meter,
Stack diameter (at the sampling point)	: 300 mm,
Sample location	: As per standard norms
Purpose of sampling	: Monitoring
Sample collected by	: By our lab representative

A Observations

1. Stack gas temperature, °C	: 124.0
2. Temperature at Metering point, °C	: 34.0
3. Avg. stack gas velocity, m/sec	: 7.59
4. Sampling flow rate, Lt./min.	: 25.0
5. Period of sampling, Minutes	: 30.0
6. Volumetric flow rate, Nm ³ /Hr	: 1412.99

B Results

S.N.	Test Parameters	Units	Results	Standard Limit	Test Method
Discipline: Chemical, Group: Atmospheric Pollution					
1	Carbon Monoxide (CO)	mg/Nm ³	79.02	100 Max	HTH/QF/7.2/2/CH-02, SOP No-23
2	Nitrogen Dioxide (NO ₂)	mg/Nm ³	146.75	400 Max	HTH/QF/7.2/2/CH-02, SOP No-23
3	Oxygen (O ₂)	%	13.70		HTH/QF/7.2/2/CH-02, SOP No-23
4	Particulate Matter (PM)	mg/Nm ³	39.34	50 Max	IS 11255 (Part-I) : 1985 : RA: 2015
5	Sulphur Dioxide (SO ₂)	mg/Nm ³	13.09	200 Max	HTH/QF/7.2/2/CH-02, SOP No-23

End of Report

Remarks : Particulate Matter Corrected @11 % O₂

Review

Dy. Manager (ENV.)



HARYANA TEST HOUSE

& Consultancy Services

GOVT. RECOGNISED LABORATORY

50-C, Sector-25 Part-II, HUDA, PANIPAT-132 103 (HR.)

Contact : (Off.) 86077-70160, 0180-3510205 (Env.) 86077-70164, (BM) 86077-70166, (Food) 86077-70169
Web Site : www.haryanatesthouse.net, e-mail : haryanatesthousees@gmail.com, info@haryanatesthouse.net



Recognition / Approval : MoEF / FSSAI / BIS / ISO 9001, 14001, 45001 Certified Lab.

TEST REPORT

Issued To:

CRYSTAL CROP. PROTECTION LTD
Village Nathupur, Sonapat (HR)

Report No. : HTH/EP/211229004
ULR No. : TC781122100000004F
Party's Ref No. : Nil

Booking Date : 29/12/2021
Period of Testing : 29/12/2021 To 03/01/2022
Reporting Date : 03/01/2022

Sample Description
Type of Industry : Stack Emission (Process)
Name of Plant/ Section : Pesticide manufacturing
Date of sampling : Scrubber Section
Source of Emission : 29/12/2021
Instrument used : Scrubber Section
Instrument Calibration Status : Stack Sampler VSS1 (Sr.No. 247 DTK 2019)
Type of Chimney : Calibrated (upto 24.12.2022)
Type of Fuel used : Metal HDPE42.0
Stack height (from the ground level) : Not Specified
Stack diameter (at the sampling point) : 12 meter
Sample Location : 150 mm
Purpose of sampling : As per standard norms
Sample collected by : Monitoring
By our lab representative

A Observations

- Stack gas temperature, °C : 30.0
- Temperature at Metering point, °C : 17.0
- Avg. stack gas velocity, m/sec : 5.09
- Sampling flow rate, Lt./min. : 21.0
- Period of sampling, Minutes : 30.0
- Volumetric flow rate, Nm³/ Hr : 306.02

B Results

S.N.	Test Parameters	Units	Result	Standard Limit	Test Method
Discipline: Chemical, Group: Atmospheric Pollution					
1	Particulate Matter (PM)	mg/m ³	24.56	150 Max	IS 11255 (Part-I) : 1985 : RA: 2011
2	Sulphur Dioxide (SO ₂)	mg/m ³	BLQ(LOQ:3.0)	-	HTH/QF/7.2/2/CH-02, SOP No-23
3	Nitrogen Dioxide (NO ₂)	mg/m ³	BLQ(LOQ:2.0)	-	HTH/QF/7.2/2/CH-02, SOP No-23

End of Report



ML Sharma
Dy. Manager (ENV.)

Review by
Hobby

31-22

- This report is not to be reproduced wholly or in part and cannot be used as an evidence in the court of law.
- This report should not be used in any advertising media without our special permission in writing.
- Sample will be destroyed after 7 days for Perishable Items & 30 days for non-perishable items from the date of issue of test report.
- The results are related to the test items only.

HARYANA TEST HOUSE

& Consultancy Services

GOVT. RECOGNISED LABORATORY

50-C, Sector-25 Part-II, HUDA, PANPAT-132 103 (HR.)

Contact : (Off.) 86077-70160, 0180 3510205 (Env.) 86077-70164, (BM) 86077-70166, (Food) 86077-70169

Web Site : www.haryanatesthouse.net, e-mail : haryanatesthouse@gmail.com, info@haryanatesthouse.net

Recognition / Approval : MoEF / FSSAI / BIS / ISO 9001, 14001, 45001 Certified Lab.

TEST REPORT

Issued To:

CRYSTAL CROP. PROTECTION LTD

Village Nathupur, Sonapat (HR)

Report No. : HTH/EP/210731007

ULR No. : TC781121100000906F

Party's Ref No. : Nil

Booking Date : 31/07/2021

Period of Testing : 31/07/2021 To 06/08/2021

Reporting Date : 06/08/2021

Sample Description : Stack Emission (DG 380 KVA)
Type of Industry : Pesticide manufacturing
Name of Plant/ Section : DG Section
Date of sampling : 31/07/2021
Capacity of DG : 380 KVA
Source of Emission : Stack Attached to DG
Instrument used : Stack Sampler VSS1 (Sr.No. 247 DTK 2019)
Instrument Calibration Status : Calibrated (upto 28.12.2021)
Type of stack : Metal
Type of Fuel used : HSD
Stack height (from the ground level) : 6 meter
Stack diameter (at the sampling point) : 6 Inch
Sample Location : As per standard norms
Purpose of sampling : Monitoring
Sample collected by : By our lab representative

A Observations

1. Stack gas temperature, °C : 220.0
2. Temperature at Metering point, °C : 34.0
3. Avg. stack gas velocity, m/sec : 14.34
4. Sampling flow rate, Lt./min. : 17.0
5. Period of sampling, Minutes : 30.0
6. Volumetric flow rate, Nm³/Hr : 546.97

B Results

S.N.	Test Parameters	Units	Result	Standard Limit	Test Method
Discipline: Chemical, Group: Atmospheric Pollution					
1	Particulate Matter (PM)	gm/kwh	0.14	0.2 Max	IS 11255 (Part-II): 1985 : RA 201
2	Nitrogen Dioxide (NO _x)	gm/kwh	0.60		HTH/QF/7.2/2/CH-02, SOP No-2
3	Carbon Monoxide (CO)	gm/kwh	0.11	3.50 Max	HTH/QF/7.2/2/CH-02, SOP No-2
4	Total Hydrocarbon (HC)	gm/kwh	0.04		HTH/QF/7.2/2/CH-02, SOP No-2
5	Nitrogen Dioxide + Total Hydrocarbon (NO _x + HC)	gm/kwh	0.64	4.0 Max	HTH/QF/7.2/2/CH-02, SOP No-2

End of Report

Review by

8.6/08/21

Dy. Manager (Env.)

HARYANA TEST HOUSE

& Consultancy Services

GOVT. RECOGNISED LABORATORY

50-C, Sector-25 Part-II, HUDA, PANIPAT-132 103 (HR.)

Contact : (OIL) 86077-70160, 0180-3510205 (Env.) 86077-70164, (ISM) 86077-70166, (Food) 86077-70169
Web Site : www.haryanatesthouse.net, e-mail : haryanatesthouse@gmail.com, info@haryanatesthouse.net

Recognition / Approval : MoEF / FSSAI / BIS / ISO 9001, 14001, 45001 Certified Lab.

TEST REPORT

Issued To:

CRYSTAL CROP. PROTECTION LTD
Village Nathupur, Sonapat (HR)

Report No. : HTH/EP/211229007
ULR No. : TC781122100000025F
Party's Ref No. : Nil

Booking Date : 29/12/2021
Period of Testing : 29/12/2021 To 04/01/2022
Reporting Date : 04/01/2022

Sample Description : Ambient Air Quality Monitoring

Type of Industry : Pesticide manufacturing
Date & time of sampling : 28/12/2021 (10:00 Hrs) to 29/12/2021 (10:00 Hrs)
Sample Location : Near Gate No.5 (ETP Area)
Instrument used : RDS Model APM- 460 BL (Sr. No. 3045 DTD 2017)
Instrument Calibration Status : Calibrated (upto 19.07.2022)
Purpose of analysis : Monitoring
Sample collected/ supplied by : By our Lab. Representative
A. Observations:
1. Sampling flow rate (Avg.) : 1.25 m³/min
2. Total volume of air sampled : 1800.00 m³
3. Period of sampling : 24 Hrs

S.N.	Test Parameters	Units	Result	Standard Limits (NAAQS)	Test Method
Discipline - Chemical, Group - Atmospheric Pollution					
1	Particulate Matter (PM10)	µg/m ³	91.22	100 max	IS 5182 (Part-23) : 2006 : RA: 2017
2	Particulate Matter (PM 2.5)	µg/m ³	49.17	60 max	IS 5182 (Part-24) : 2019
3	Sulphur Dioxide (SO ₂)	µg/m ³	19.97	80 max	IS 5182 (Part-2) : 2001 : RA: 2017
4	Nitrogen Dioxide (NO ₂)	µg/m ³	34.93	80 max	IS 5182 (Part-6) : 2006 : RA: 2017
5	Ammonia (NH ₃)	µg/m ³	49.64	400 max	IS 5182 (Part-25) : 2018
6	Ozone (O ₃)	µg/m ³	22.56	100 max	IS 5182 (Part-9) : 1974 : RA: 2017
7	Carbon Monoxide (CO)	mg/m ³	0.687	4 max	IS 5182 (Part-10) : 1999 : RA: 2017
8	Benzene (C ₆ H ₆)	µg/m ³	BLQ (LOQ-0.52)	5 max	IS 5182 (Part-11) : 2006 : RA: 2017
9	Benzo - Pyrene (BaP)	ng/m ³	BLQ (LOQ-0.1)	1 max	IS 5182 (Part-12) : 2004 : RA: 2019
10	Lead (Pb)	µg/m ³	BLQ (LOQ-0.02)	1 max	IS 5182 (Part-22) : 2004 : RA: 2019
11	Nickel (Ni)	ng/m ³	BLQ (LOQ-2)	20 max	HTH/QF/7.2/2/ICP-01 SOP No 17
12	Arsenic (As)	ng/m ³	BLQ (LOQ-1)	6 max	HTH/QF/7.2/2/ICP-01 SOP No 17

End of Report

Remarks : Standard limits are as per CPCB notification Nov. 2009
BLQ : Below limit of Quantification / LOQ : Limit of Quantification



ML Sharma
Dy. Manager (ENV.)

PART - D

Hazardous Wastes

(As specified under Hazardous Waste Management and Handling Rules, 1989)

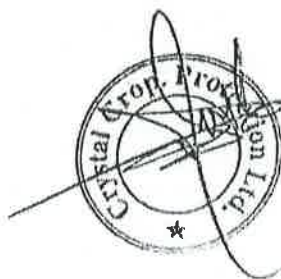
Hazardous Waste	Total Quantity Disposed (Kg)	
	During the previous financial year	During the Current financial year
a) From Process		
i) Residue from Solvent Purification	4025 Kg Incinerated	3900 Kg Incinerated
ii) Used Mobile Oil	300 liter Used for lubrication of lathe machine	i) 250 liter To recycler or co-processors To OM Industry
b) From Pollution Control Facility		

PART - E

Solid Wastes

Solid Waste	Total Quantity Disposed (Kg)	
	During the Previous Financial Year	During the Current Financial Year
a) From Process (Process Sludge)	6000 Kg	16600 Kg
b) From Pollution Control Facility (MEE Sludge)	4850 Kg	16800 Kg
c) Incinerated Ash	50 Kg	Nil
d) Plastic Waste	Nil	Nil
e) Cotton Waste	Nil	Nil
f) (1) Quantity Recycled or re-utilized within the unit	Nil	Nil
(1) Sold	Nil	Nil
(2) Disposed	10900 Kg Given to GEPIL	33400 Kg Given to GEPIL

PART - F



Please specify the characterizations (in terms of composition of quantities) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

S. No	Category	Quantity	Disposal Method
Hazardous Waste			
1	Solvent Residue	3900 Kg	Incinerated in dual Furnace incinerator
2	Used Oil	250 liter	i) To recycler or co-processors To OM Industry
Solid Waste			
1	Process sludge	16600 Kg	To GEPIL
2	M.E.E sludge	16800 Kg	TO GEPIL

PART - G

Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production.

PART - H

Additional measures/investment proposal for environmental protection including abatement of pollution, prevention of pollution.

1. Multi effect evaporator - Reduces Fresh water requirement.
2. Acoustic Enclosure of DG Set-Reduces Noise pollution.
3. High Temperature Incinerator equipped with air pollution control devices-reduces air Pollution.
4. Solid waste Management practice-helps in reducing pollution.
5. Continuous Online Effluent Monitoring Devices- Monitor effluent quality.

PART - I

Any other particulars for improving the quality of the environment.

To minimizing any vapor or fumes we have installed dual condensers on every reactors. utility in primary condenser is water & chilled brine secondary condenser. Even vent of secondary condensers are connected to wet scrubber. Also we have installed excess capacities of utilities. A500 TR cooling tower & 30 TR brine chilling plant at -25 deg C



Products	Sample Size	Primary Packaging	Secondary Packaging	Transport Packaging	
1.	CF- 1837 WG	100ml, 200ml, 500ml, 1 lit	HDPE Jar	Mono carton	5 Ply Corrugated Box
2.	CI- 6102 WG	100g, 250g, 500g, 1kg	HDPE jar	Mono carton	5 Ply Corrugated Box
3.	CI- 5211 ME	100g, 250g, 500g, 1kg	HDPE jar	Mono carton	5 Ply Corrugated Box
4.	CCP-75603 WG	350g, 700g, 1.5 kg, 3.5kg	HDPE jar	Mono carton	5 Ply Corrugated Box
5.	CCP-1221 WG	100g, 250g, 500g, 1kg	HDPE jar	Mono carton	5 Ply Corrugated Box
6.	CH-24124 WG	25g, 50g, 100g, 250g, 500g, 1kg	HDPE/Co-ex jar	Mono carton	5 Ply Corrugated Box
7.	GA 2021 T	10-tab, 25-tab, 50 tabs	HDPE jar	Mono carton	5 Ply Corrugated Box
8.	CI-6121G	1kg, 2.5kg, 5kg, 10kg	Trilaminate	-	5 Ply Corrugated Box

