

COMPREHENSIVE ACTION PLAN
FOR CRITICALLY POLLUTED INDUSTRIAL CLUSTERS OF
GHAZIABAD (U.P.)

(Progress of Action Plan as per Review Meeting held by District
Magistrate Ghaziabad on 5-2-2011)



U.P. POLLUTION CONTROL BOARD
PICUP BHAWAN, GOMTI NAGAR, LUCKNOW
Feb, 2010

Tele Fax: 0522-2720918

E-Mail: ceo1@uppcb.com

Website: www.uppcb.com

12. Summary of Proposed Action Points

12.1 Short Term Action Points (up to 1 year, including continuous activities)

S. No.	Action Points (Source and Mitigation)	Responsible Stake Holders	Time Limit/Frequency	Progress Made So far up to Feb'11 reviewed in the District Magistrate Meeting held on 5.2.2011.
1.	<p style="text-align: center;">WATER POLLUTION</p> <p>a) Industrial Source Proposed Action Plan for effective control of Water Pollution:</p> <ul style="list-style-type: none"> Regular effluent sample collection and analysis of Pollution Control System in Large & Medium & Small Scale Polluting Industries to be done to ensure strict compliance of prescribed Norms. It is to be mentioned that a total of 67 industries are categorized as Large & Medium units whereas 313 units are covered under SSI category in whole of Ghaziabad, which are polluting in nature. All such units have installed adequate effluent treatments plant and are being monitored by UPPCB. Also it is being ensured by UPPCB that new units are set up with adequate pollution control system and the site is compatible. Installation of energy meter, on line PH meter, automatic chemical dozing system, on line flow measurement and installation of independent laboratory to monitor critical parameters like MLSS, SVI etc. and other inlet and outlet parameters of ETP for Large & Medium Industries. Units under SSI Category numbering about 150 are dying units engaged in dying of jeans and readymade garments in different industrial estates. All such units have installed physicochemical treatment facilities in the ETPs. Use of Poly 	<p>UPPCB & Individual Industry</p> <p>Individual Industries (Large & Medium)</p> <p>UPPCB & Individual Industry</p>	<p>Frequency Large & Medium Industries -Every 3 months Small Scale Industries -Every 6 months (By UPPCB) & By Individual Industries as follows - L & M - Every 3 Months. Small – Once a Year</p> <p>With in 9 months</p> <p>UPPCB & individual Industries within 09 months.</p>	<p>Being monitored as per schedule.</p> <p>Such industries have been identified and notices are being sent to industries.</p> <p>Such industries have been identified and notices are being sent to industries.</p>

S. No.	Action Points (Source and Mitigation)	Responsible Stake Holders	Time Limit/Frequency	Progress Made So far up to Feb'11 reviewed in the District Magistrate Meeting held on 5.2.2011.
	<p>electrolytes brings the effluent with in standards. Some of the units require installation of additional / tertiary units such as Dual media filter and activated Carbon filter, on case to case basis these dyeing units are being directed that they will not switch over to dyeing of synthetic fibers nor will use Chrome based dyes in future as well.</p> <ul style="list-style-type: none"> As regards feasibility / possibility of CETP for dyeing units at Sahibabad industrial area, it is to mention that discharge from Sahibabad industrial area meets Sahibabad drains which carries untreated sewage. The Sahibabad drains after meeting point of Sahibabad industries area has been planed to be trapped and a STP of 66 MLD is being installed at Indirapuram by U.P. JalNigam. In order to stop discharge of sewage and STP construction work is in progress and 95% of sewerage work and 50% of STP work has been completed the works are expected to be completed by Mar 2011 and to stop discharge of sewage/industrial waste water from Ghaziabad into Drain No. 1 (Sahibabad Drain), it is proposed to tap Sahibabad Drain Near NH-24 and divert the flow through a sewer to Indirapuram STP and a separate STP of 74 MLD capacity will be installed in Indirapuram. These work will be completed by Dec 2011. <p>In case of any problem in operation of proposed STP due to industrial load, CETP dedicated for dyeing units and other small scale units may be planned and UPSIDC is to divert industrial drains in order to tap the industrial effluent. Also separate conveyance system for carrying the effluent to CETP is to be ensured by UPSIDC. Land for CETP to be provided by UPSIDC. A detailed feasibility report to be submitted by UPSIDC with in 01 year. At the same time proposed STP of 74 MLD at Indirapuram can be checked for taking up the industrial</p>	<ol style="list-style-type: none"> STP to be installed by Dec 2011 as per submission made by Urban Development Department, Govt. of U.P. to EPCA. Performance study of proposed STP to be done by U.P. Jal Nigam with in 03 months of its operation. In case of any adverse impact on performance of STP, UPSIDC & Sahibabad Industrial Area Association to submit the 	<p>Completion & Operation of STP at Indirapuram Ghaziabad by Dec 2011</p>	<ul style="list-style-type: none"> 02 STPs of 56 MLD (Indirapuram) and 70 MLD (Vijay Nagar) are operational in Ghaziabad and are being regularly monitored by the official of State Board. Also directions have been issued to authorities for effective operations of STPs and to ensure that treated effluent is as per the prescribed norms. Proposed STP of 56 MLD capacity is under construction and expected to be completed by June

S. No.	Action Points (Source and Mitigation)	Responsible Stake Holders	Time Limit/Frequency	Progress Made So far up to Feb'11 reviewed in the District Magistrate Meeting held on 5.2.2011.
	<p>load after its operation. At present the discharges of the dyeing industries do not carry any toxic elements such as Cr or Ni in excess which can inhibit the operation of STP. The Sahibabad Industrial State Association is to be involved and will be the main stake holder for setting up of separate CETP for Sahibabad industrial area.</p> <ul style="list-style-type: none"> • 01 CETP of 04 MLD capacity is operational at Tronica City Ghaziabad for Textile Units in SSI Sector. Presently very few industries are in operation. CETP needs effective operation & maintenance & regular inspection & monitoring by UPPCB. • UPSIDC and DIC should not register new dyeing units at Sahibabad and Loni industrial area. Rather proposal of new proposed units should be sent to Tronica city where CETP 	<p>feasibility report of CETP with in 01 year.</p> <p>UPSIDC & UPPCB</p> <p>UPSIDC & DIC</p>	<p>Ongoing Activity</p>	<p>2011.</p> <ul style="list-style-type: none"> • Proposed STP of 74 MLD capacity is under construction and expected to be completed by December 2011. • Proposed STP of 30 MLD capacity is under construction and expected to be completed by Dec 2011. • Besides above, 03 STPs each of 56 MLD capacity are under construction and expected October 2011. <p>Being Monitored.</p> <p>UPSIDC & DIC have been asked not to register dying units at Sahibabad & Loni. Dying units should be</p>

S. No.	Action Points (Source and Mitigation)	Responsible Stake Holders	Time Limit/Frequency	Progress Made So far up to Feb'11 reviewed in the District Magistrate Meeting held on 5.2.2011.
	<p>has been installed.</p> <ul style="list-style-type: none"> It is being ensured that all the Slaughter Houses whenever installed, have either set up own rendering plants or have entered in to agreement with rendering plants approved by UPPCB. Closure orders have already been issued against slaughter house of Nagar Palika Parishad Loni, Ghaziabad. 	UPPCB		directed to set up plants at Tronica City.
b)	<p>Groundwater Pollution</p> <p>➤ Previously due to improper dumping of Hazardous Waste/chromium bearing effluent the ground water quality of Lohia Nagar area of Ghaziabad has been adversely affected. The main culprits were following industries :</p> <ol style="list-style-type: none"> M/S Shree Ram Piston & Rings. M/S Mascot India (P) Ltd. M/S Kathuria Brothers (P) Ltd. M/S Marshall cycle (P) Ltd. <p>In order to ensure supply of potable water in effected locality, committee has been formed under Nagar Ayukt. 01 no. of deep tube well has been installed in the area with contribution from identified units and 01 is under installation.</p> <p>Board gave directions to all above units to submit short term as well as long term action plans. Under the short term action plan 01 tube well has already been installed for the supply of potable water in the affected area installation of 01 tube well is in progress. Under the long term action plan Bio Remediation of polluted ground water is to be carried out in a time bound manner. Board has taken Bank Guarantee of Rs. 2.0 Crores from M/s Shri Ram Piston & Rings Ltd. in lieu of supply of potable water & Ground Water remediation in Lohiya Nagar Area Ghaziabad.</p>	Individual Industries	06 months for short term & 03 years for long term by Industries.	<ul style="list-style-type: none"> In Lohia Nagar Ghaziabad 02 Tube wells have been installed, commissioned and handed over to Nagar Nigam. Supply of safe potable water is being ensured in the affected area. For cleaning up of Gruond Water Pollution Long term Action Plan involving Pump & Treat Method for the treatmemnt of Ground Water along with Bio-Remediation of Ground Water has been submitted to the Board by concerned Industries and is under the process of implementation.

S. No.	Action Points (Source and Mitigation)	Responsible Stake Holders	Time Limit/Frequency	Progress Made So far up to Feb'11 reviewed in the District Magistrate Meeting held on 5.2.2011.
	<p>Remediation plan has been submitted by M/s Shri Ram Piston & Rings Ltd. utilizing the process of pump & treat method besides treatment of ground water by utilizing the microbial culture. A technical presentation has been made by the concerned unit on 10-11-2010 at Head Office of UPPCB & the process of Ground Water Remediation in process.</p> <p>U.P.P.C.B. has issued closure order under the provisions of Water Act 1974 against M/s Ajanta Additives. Also directions have been issued for submission of action plan for remediation of coloured ground water. Which is non toxic, does not contain any toxic metals. At present no coloured effluent is stored in the unit.</p> <p>In order to solve the problem of ground water pollution in the effected area following steps have taken/proposed.</p> <ul style="list-style-type: none"> All the identified units have installed ETPs for chromium treatment and also become member of common TSDF and are sending their waste to TSDF. Direction have been issued to all the identified industries to submit short term Action Plan involving proposal for alternate potable water supply in effected area. Monthly sampling of installed tube wells at Lohia nagar, Near Hamdard factory, within Sahibabad Industrial area, Rajendra nagar, Merrut Road Industrial Area and Loni etc. for colour, pH, BOD, Cr, Ni, Cd, Pb etc.. Regular Ground Water Monitoring of the area to be conducted. 	<p>Individual Industry</p> <p>UPPCB/ CGWB</p> <p>UPPCB, CGWB</p>	<p>Ongoing Process.</p> <p>06 months for submission of short term Action Plan.</p> <p>Ground Water Sampling & Monitoring every 02 months.</p> <p>Once in a year.</p>	<p>M/s Ajanta Additives has submitted Action Plan for remediation of Ground Water of affected area.</p> <p>Being Monitored.</p> <p>02 Tube wells have been installed by the contribution of industries and handed over to Nagar Nigam for operation.</p> <p>Being done as per schedule.</p>

S. No.	Action Points (Source and Mitigation)	Responsible Stake Holders	Time Limit/Frequency	Progress Made So far up to Feb'11 reviewed in the District Magistrate Meeting held on 5.2.2011.
c)	<p>Domestic Waste Water (Sewage) Domestic sewage contributes to about 80% of Water. The status of Sewage Pollution Control in Ghaziabad is as follows:</p> <ul style="list-style-type: none"> ➤ 02 STPs are Operational: <ul style="list-style-type: none"> • 70 MLD - At Vijayanagar • 56 MLD - At Indirapuram <p>The operation of existing STPs is not satisfactory and needs improvements. U.P.P.C.B. has issued directives to U.P. JalNigam for upgradation for the STP technology by upgrading oxidation pond in to Aerated Lagoon.</p> <p>Plan regarding total sewerred and unsewerred area in Ghaziabad and action plan for the same will be prepared by Nagar Nigam Ghaziabad with in 06 months.</p> <ul style="list-style-type: none"> ➤ Effective operation, up gradation & maintenance of installed STP. ➤ Inspection of STPs by UPPCB ➤ Upcoming High Rise Buildings, Commercial Project, Educational Institution, Multi Plexes, Town ship & Building Projects are major source of sewage generation and Municipal Solid Waste. Such projects must ensure setting up of STPs, recirculation of treated water for flushing/gardening regarding purpose & ensure compliance of the conditions of the Environment Clearance and NOC from PCB 	<p>GDA/ Nagar Nigam/ U.P. Jal Nigam</p> <p>Nagar Nigam Ghaziabad</p> <p>Project proponent GDA, Nagar Nigam & UPPCB.</p> <p>Monitoring by UPPCB</p>	<p>Time period to be given by Nagar Nigam to UPPCB in 03 months.</p> <p>6 Months.</p> <p>Compliance Report Every 3 Months to UPPCB by Project proponent. (Ongoing Process)</p>	<p>Proposal under consideration.</p> <p>02 Crore/year</p> <p>Inspection done on monthly basis.</p> <p>Being Monitored.</p>

S. No.	Action Points (Source and Mitigation)	Responsible Stake Holders	Time Limit/Frequency	Progress Made So far up to Feb'11 reviewed in the District Magistrate Meeting held on 5.2.2011.
d)	<p>Infrastructural facilities: Drainage problem has been reported in UPSIDC owned industrial areas leading to choking of the drain and ponding of water. Authority is advised to regularly clean drainage system to avoid water stagnation / over flowing.</p>	UPSIDC	Every Month.	
e)	<p>Hindon River Pollution Presently river Hindon gets polluted water from Saharanpur, Mujaffarnagar and upstream of Ghaziabad. It is being monitored at three sites fortnightly for specific parameters.</p> <ul style="list-style-type: none"> It is proposed to monitor Hindon river for colour, total coliform, fecal coliform and regular parameters like BOD, COD, and DO. Strict vigil on discharge of Industries at Muzaffarnagar & Saharanpur especially Agro based Paper Mills at Mujaffarnagar through Kali West & Distillery at Saharanpur through Hindon & Krishana. 	UPPCB Regional Officer, UPPCB Saharanpur & Mujaffar Nagar for industries located upstream.	Sampling & Monitoring every month by Regional Officer, Ghaziabad UPPCB.	<ul style="list-style-type: none"> The water quality of River Hindon is being Monitored regularly by the official of the Board. Board has imposed a ban of the use of Agro Based Raw Material in all the Paper Mills in the Catchments Area of River Hindon till the installation of chemical recovery plant.
f)	<p>Illegal setup of Industrial activities</p> <ul style="list-style-type: none"> Many Industries after being shifted from Delhi have been set up illegally in Tila Shahbazpur and other adjoining residential areas causing environment pollution and nuisance by discharging polluted effluent without any treatment. Regular combined drives are to be carried out by Pollution control board and District Administration to identify and seal such illegal industrial activities. Details of Illegal units along with details of drives already conducted conducted by U.P.P.C.B. in coordination with District Administration is enclosed as Annexure. Electricity connections in favour of new projects not to be issued with out NOC from environmental angle by UPPCB. Also UPPCL to ensure that electric connection is not sanctioned in favor of such industries which are not in conforming area. 	<p>UPPCB and District Admn.</p> <p>UPPCL and Udyog Bandhu, Ghaziabad</p>	<p>Combined drives every 2 months by UPPCB & District Administration.</p> <p>With immediate effect.</p>	Being done as per schedule.

S. No.	Action Points (Source and Mitigation)	Responsible Stake Holders	Time Limit/Frequency	Progress Made So far up to Feb'11 reviewed in the District Magistrate Meeting held on 5.2.2011.
2.	<p style="text-align: center;">AIR POLLUTION</p> <p>a) Industrial: A total of 67 industries categorized as Large & Medium units & 313 units under SSI category have been identified under Red Category Polluting Industries in the area.</p> <p>Proposed Action Plan for effective control of Air Pollution:</p> <ul style="list-style-type: none"> • Regular Monitoring of Pollution Control System in Industries in order to ensure strict compliance of prescribed Norms. <p>Major industrial sector of concern from Air Pollution point of view are as below:</p> <ul style="list-style-type: none"> ➤ Forging - Such units use boiler for steam generation for the purpose of hammering. Such units need to upgrade APCS along with Noise Control System. ➤ Induction Furnace - Such industries are marked with generation of substantial amount of process of Air Emission. Provision of secondary hoods & additional ID Fan etc. for collection of untrapped Air Emission in all the Induction Furnaces. 	<p>UPPCB & Individual Industries.</p> <p>Forging Units.</p> <p>Individual Industries.</p>	<p>Stack Monitoring of Large & Medium units every 06 months and once in a Year for SSI units. (By UPPCB) Stack Monitoring by Large & Medium units themselves every 06 months. (By individual Industries)</p> <p>09 Months</p> <p>09 Months by Industries,</p>	<p>Being done as per schedule.</p> <p>Industries are identified and direction are being issued.</p> <p>Industries are identified and direction are being issued.</p>

S. No.	Action Points (Source and Mitigation)	Responsible Stake Holders	Time Limit/Frequency	Progress Made So far up to Feb'11 reviewed in the District Magistrate Meeting held on 5.2.2011.
b)	<p>Common Bio-Medical Waste Treatment Plant One Common Bio-Medical Waste Treatment Plant of 150 kg/hr. capacity is being operated by M/S Samb Rankey Ghaziabad. The facilities comprises of Shredder, Auto Clave, Double Chamber incinerator, ETP, Venturi scrubber, water scrubber, 30 meter stack. All the Hospitals / Nursing Homes of Ghaziabad are Members of CWHCF.</p> <ul style="list-style-type: none"> ➤ Effective operation & maintenance of installed Common Bio-Medical Waste Treatment Plant(CBMWTP) ➤ Inspection and monitoring of Hospitals / Nursing Homes by Regional Office UPPCB. 	<p>Common Bio-Medical Waste Treatment Plant operator. & UPPCB.</p> <p>UPPCB.</p>	<p>Common Bio-Medical Waste Treatment Plant operator, Inspection & Monitoring of CBMWTP Every 03 month by UPPCB.</p> <p>Big Hospitals every 03 months Small Hospitals every 06 months by UPPCB.</p>	<p>Inspection and monitoring being done as per schedule.</p>
c)	<p>Common Hazardous Waste Incinerator</p> <p>(a) 01 Common Hazardous Waste Incinerator of 200 kg/hr. capacity is being operated by M/S Bharat Oil Co. Ltd. in Sahibabad industrial area, Ghaziabad. The facilities comprises of Double Chamber incinerator, ETP, Venturi scrubber, water scrubber, 30 meter stack.</p> <p>(b) All the hazardous waste generating units have become member of TSDF Kanpur Dehat or Common Incinerator at Ghaziabad.</p> <ul style="list-style-type: none"> • Effective collection, operation & maintenance of installed Common Hazardous Waste Incinerator. 	<p>Common Hazardous Waste TSDF/</p>	<p>Ongoing</p>	<p>Being monitored as per schedule.</p>

S. No.	Action Points (Source and Mitigation)	Responsible Stake Holders	Time Limit/Frequency	Progress Made So far up to Feb'11 reviewed in the District Magistrate Meeting held on 5.2.2011.
	<ul style="list-style-type: none"> • Inspection and Stack Monitoring of Common Incinerator by Regional Office UPPCB • Proper storage of Hazardous Waste within campus & to send to TSDF by individual Industries. 	Incinerator operator UPPCB Individual Industry	UPPCB Every 3 months. Individual Industry, every 03/04 months	Being monitored as per schedule. Being monitored as per schedule.
d)	Illegal setup of Industrial activities <ul style="list-style-type: none"> • Many Industries after being shifted from Delhi have been set up illegally in Tila Shahbazpur and other adjoining residential areas causing environment pollution by using Baby Boilers or using fuel for steam generation and by discharging polluted effluent without any treatment. • Regular combined drives are to be carried out by Pollution control board and District Administration to identify and seal such illegal industrial activities. Details of Illegal units along with details of drives conducted by U.P.P.C.B. in coordination with District Administration is enclosed as Annexure. • Electricity connections in favour of new projects not to be issued with out NOC from environmental angle by UPPCB. Also UPPCL to ensure that electric connection is not sanctioned in favor of such industries which are not in conforming area. 	UPPCB and District Admn. UPPCL and Udyog Bandhu	Combined drives every 2 months by UPPCB & District Administration. Within 01 month	Being done as per schedule.
e)	Monitoring of D.G Sets: <ul style="list-style-type: none"> ➤ Inventorisation of Old D.G. Sets in Industrial clusters and Commercial set ups including Multiplexes / Shopping Malls/ Educational Institution within or near industrial areas to be done by UPPCB. ➤ Post inventorisation remedial action with respect to air and noise pollution from likely sources shall be taken against defaulters 	UPPCB UPPCB UPPCB	09 Months June 2011 09 Months	Inventorisation in progress.

S. No.	Action Points (Source and Mitigation)	Responsible Stake Holders	Time Limit/Frequency	Progress Made So far up to Feb'11 reviewed in the District Magistrate Meeting held on 5.2.2011.
	➤ Installation of Acoustic Enclosure with required APCS and adequate stack height in Old D G Sets to be ensured.			
3. a)	<p>Land Pollution</p> <p>Proper Storage & Disposal of Hazardous Waste & Solid Waste.</p> <p>The status of Hazardous Waste Disposal in Ghaziabad are as follows:</p> <ul style="list-style-type: none"> ➤ Total No. of Units - 330 ➤ Self Closed Units - 64 ➤ Operational Units - 266 ➤ Units recycling the waste - 36 ➤ Units which have become member of Common TSDF - 230 ➤ Units which are not member of Common TSDF - 00 <ul style="list-style-type: none"> ● Units are to send landfillable / incinerable hazardous waste to approved TSDF. ● Hazardous Waste generating units to be monitored regularly for compliance 	<p>Individual Industry</p> <p>UPPCB</p>	<p>To send waste every 03/04 months to TSDF</p> <p>To monitor individual industries every six months</p>	<p>Being monitored as per schedule.</p> <p>Being monitored as per schedule.</p>
b)	<p>Bio-Medical Waste Disposal</p> <p>247 Hospital & Health Care Facilities are identified in Ghaziabad out of which all. 247 are member of Common BMW Treatment Facilities.</p> <p>Regular Inspection and monitoring of Hospitals / Nursing Homes has to be done</p>	UPPCB	Inspection of Big Hospitals Every 03 months & Small Hospitals every 06 months by UPPCB.	Being monitored as per schedule.

12.2 Long Term Action Points (more than 1 year)

S. No.	Action Points (Source and Mitigation)	Responsible Holders	Stake	Time Limit / Frequency	Progress made so far up to Feb'11 reviewed in the district magistrate meeting held on 05-02-11.
1. a)	<p style="text-align: center;">WATER POLLUTION</p> <p>Industrial Pollution</p> <ul style="list-style-type: none"> Adoption of Cleaner Technology if available, in order to reduce quantity of waste water. Promote recycle after treatment for sector like Paper, Tannery. Strategies regarding cleaner technologies in Paper, Tanneries are to be conducted in a time bound manner. In the Waste Paper based units, stress is being laid for setting up of tertiary treatment facilities in order to ensure maximum recycling of treated waste water. Also recycling of the process water is being done as part of cleaner technologies. In the Tannery sector, the strategies regarding cleaner technologies include setting up of Chrome Recovery Plant and adoption of salt less technology / adoption of better salt management technologies in order to achieve lower TDS level in effluent. Also measures to be incorporated in process in order to maximise the recirculation ratio of water so that the consumption of fresh water gets minimised. U.P.P.C.B. is ensuring that highly water polluting industries are monitored regularly and frequently in 	<p>Individual Industries</p> <p>UPPCB & Individual Industries.</p> <p>UPPCB Individual Industries.</p>	<p>Individual Industries</p> <p>Individual Industries</p>	<p>Within 02 Years. (By Industries)</p> <p>02 year (By Industries)</p> <p>With in 06 months</p>	<p>Agro Waste Based Paper Mills have been directed to not to operate without installation of chemical recovery plant. All the tannery's have installed and its operation being monitored regularly.</p> <p>Being monitored as per schedule.</p>

	<p>order to ensure effective pollution control. The list of highly polluting industry is enclosed. Also on case to case bases directions are issued for upgradation of their ETPs if not adequate.</p> <ul style="list-style-type: none"> • In case of such individual industries wherever required, workable and achievable action plan for Water Pollution Control shall be submitted by 31st Dec 2010 and implementation of action plan will be ensured by 30th September 2011. • Upgradation of ETP's: Conversion of conventional reduction treatment of electroplating waste water to Ion exchange method and its recycling in Large & Medium sector units, wherever existing ETP is not functioning properly. 	<p>Individual Industries.</p> <p>Individual Industries</p>	<p>30th September 2011.</p> <p>01 year</p>	<p>Industries such as distilleries have being identified and directions have been issued for preparation of Action Plan.</p> <p>Industries are being identified and direction will be issued.</p>
<p>b)</p>	<p>Domestic Waste Water (Sewage)</p> <p>➤ In order to insure treatment of total sewage generated so that no untreated sewage is discharged, 07 STP are proposed to be set up under Yamuna Action Plan as follows:</p> <ul style="list-style-type: none"> • 56 MLD at Dudaheda • 30 MLD at Loni • 74 MLD at Indirapuram (By tapping SBD drain) • 56 MLD at Indirapuram • 60 MLD at Bamheta • 36 MLD at Morta 	<p>GDANagar Nigam/ U.P. Jal Nigam / UPPCB</p>	<p>Time limit to be submitted with in 03 months</p>	<ul style="list-style-type: none"> • 02 STPs, 56 MLD (Indirapuram) & 70 MLD (Vijaynagar) are operational in Ghaziabad and are being regularly monitored by the official of the State Board. Also direction have been issued to authorities for effective operation of STPs & ensure that treated effluent is as per the prescribed norms. • Proposed STP of 56 MLD capacity is under construction and expected to completed by June'2011. • Proposed STP of 74 MLD capacity is under construction and expected to be completed by

	<p>➤ Also 02 STPs are proposed to be set up by GDA as follows.</p> <ul style="list-style-type: none"> ● 56 MLD at Bapudham ● 56 MLD at govindpuram <p>➤ Effective operation, up gradation & maintenance of installed 2 STPs (56 MLD at Indirapuram & 70 MLD at Vijainagar). Since treated sewage is not conforming to Board's standards (upgradation of polishing tanks to aerated lagoons etc.). Directions already issued to Nagar Nigam by UPPCB.</p> <p>➤ Inspection & Monitoring of STPs.</p> <p>➤ Covering of major open Nalas carrying domestic sewage.</p>	<p>GDA</p> <p>Nagar Nigam</p> <p>UPPCB</p> <p>Nagar Nigam/GDA</p>	<p>Time limit to be submitted with in 03 months</p> <p>Effective O&M to be done with immediate effect. Proposals for upgradation to be submitted with in 06 months.</p> <p>Every 03 months</p> <p>Identification of major open Nalas to be completed in 03 months. Submission of time bound plan for Covering of major open Nalas carrying domestic</p>	<p>Dec'2011.</p> <ul style="list-style-type: none"> ● Proposed STP of 30 MLD capacity is under construction and expected to be completed by Dec'2011. ● Besides above three STPs each of 56 MLD capacity are under construction and expected to be completed by Oct'2011. <p>Being done on monthly basis.</p>
--	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

	<p>➤ Problem of water logging in different area. Nagar Nigam and UPSIDC to identify such pockets where water logging as a result of inadequate conveyance system occurs frequently. Nagar Nigam and UPSIDC to submit the action plan for solving the problem of water logging including activities like regular cleaning of conveyance system and laying of new conveyance system wherever found inadequate.</p>	Nagar Nigam/UPSIDC	<p>sewage with in 06 months.</p> <p>With in 03 months.</p> <p>With in 06 months.</p>	
c)	<p>Groundwater Pollution :</p> <p>➤ Gound water study in all the 22 Industrial clusters may be carried out by outsourcing Agencies on yearly basis.</p> <p>➤ Previously due to improper dumping of Hazardous Waste/chromium bearing effluent the ground water quality of Lohia Nagar area of Ghaziabad has been adversely affected. The main culprits were following industries :</p> <ol style="list-style-type: none"> 1. M/S Shree Ram Piston & Rings. 2. M/S Mascot India (P) Ltd. 3. M/S Kathuria Brothers (P) Ltd. 4. M/S Marshall cycle (P) Ltd. <p>In order to ensure supply of potable water in effected locality, committee has been formed under Nagar Ayukt. 01 no. of deep tube well has been installed in the area with contribution from identified units and 01 is under installation.</p> <p>Board gave directions to all above units to submit short</p>	<p>UPPCB and designated agencies</p> <p>Individual Industries</p>	<p>Every Year</p> <p>06 months for short term.</p>	<p>● In Lohia Nagar Ghaziabad 02 Tube wells have been installed, commissioned and handed over to Nagar Nigam. Supply of safe potable</p>

	<p>term as well as long term action plans. Under the short term action plan 01 tube well has already been installed for the supply of potable water in the affected area and installation of 01 tube well is in progress. Under the long term action plan Bio Remediation of polluted ground water is to be carried out in a time bound manner. Board has taken Bank Guarantee of Rs. 2.0 Crores from M/s Shri Ram Piston & Rings Ltd. in lieu of supply of potable water & Ground Water remediation in Lohiya Nagar Area Ghaziabad. Remediation plan has been submitted by M/s Shri Ram Piston & Rings Ltd. utilizing the process of pump & treat method besides treatment of ground water by utilizing the microbial culture. A technical presentation has been made by the concerned unit on 10-11-2010 at Head Office of UPPCB & the process of Ground Water Remediation in process.</p> <p>U.P.P.C.B. has issued closure order under the provisions of Water Act 1974 against M/s Ajanta Additives. Also directions have been issued for submission of action plan for remediation of coloured ground water. Which is non toxic, does not contain any toxic metals. At present no coloured effluent is stored in the unit.</p> <p>In order to solve the problem of ground water pollution in the effected area following steps have taken/proposed.</p> <ul style="list-style-type: none"> All the identified units have installed ETPs for chromium treatment and also become member of common TSDF and are sending their waste to TSDF. Monthly sampling of installed tube wells at Lohia nagar, Near Hamdard factory, within Sahibabad Industrial area, Rajendra nagar, Merrut Road Industrial Area and Loni etc. for colour, pH, BOD, Cr, Ni, Cd, Pb etc.. 	<p>Individual Industry / UPPCB</p> <p>UPPCB/ CGWB</p>	<p>03 years for long term by Industries.</p> <p>Ongoing Process.</p> <p>Ground Water Sampling & Monitoring every 02 months.</p>	<p>water is being ensured in the affected area.</p> <ul style="list-style-type: none"> For cleaning up of Gruond Water Pollution Long term Action Plan involving Pump & Treat Method for the treatmemnt of Ground Water along with Bio-Remediation of Ground Water has been submitted to the Board by concerned Industries and is under the process of implementation. <p>M/s Ajanta Additives has submitted Action Plan for remediation of Ground Water of affected area.</p> <p>Being Monitored.</p> <p>02 Tube wells have been installed by the contribution of industries and handed over to Nagar Nigam for operation.</p>
--	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

	<ul style="list-style-type: none"> Regular Ground Water Monitoring of the area to be conducted. 	UPPCB, CGWB	Once in a year.	Being done as per schedule.
d)	<p>Hindon River Pollution :</p> <p>Presently river Hindon gets polluted water from upstream of Ghaziabad. It is being monitored at three places every month for specific parameters.</p> <p>River Hindon receives pollution load from upstream stretches of Saharanpur, Mujaffarnagar, Bagpat. The highly polluting units in these stretches like Agro based Pulp & Paper units, Distillery, Sugar units are regularly inspected on quarterly basis in order to ensure compliance.</p> <p>To monitor Hindon river at above 3 points every month for metal like Cd, Pb, Cu, Cr beside regular parameters after getting AAS.</p>	<p>UPPCB</p> <p>RO UPPCB Saharanpur, Mujaffarnagar, Bagpat.</p>	Every 03 months by respective R.Os.	<ul style="list-style-type: none"> The water quality of River Hindon is being monitored regularly by the official of the Board. Board has imposed a ban of the use of Agro Based Raw Material in all the Paper Mills in the Catchments Area of River Hindon till the installation of Chemical Recovery Plant.
2.	AIR POLLUTION			
a)	<p>Industrial Pollution</p> <ul style="list-style-type: none"> Implementation of Cleaner Technology in order to reduce quantity of process and fugitive emissions and Effective operation & maintenance of installed APCS Switching over to cleaner fuel has been proposed as the best option to control Air Pollution in Industrial Areas. To supply and promote the use of cleaner fuel like CNG, in order to reduce emissions in the industrial Baby Boiler in dying units used coal as fuel and generates uncontrolled stack emission. Such units need APCS in first phase till CNG is not available. 	<p>Individual industry</p> <p>Individual industry</p> <p>Various gas agencies</p> <p>Individual Industries.</p>	<p>02 Years</p> <p>01 year subject to availability of CNG</p> <p>01 year subject to availability of CNG</p> <p>01 year</p>	<p>Industries are being identified.</p> <p>CNG supply has been started by M/s Indraprastha Gas Ltd. and in the first phase, Air Polluting units of Sahibabad Industrial Area have taken Gas connection and have switches to CNG as industrial fuel. 10 units have sent interest letter for CNG connection.</p>

b)	<p>Introduction of Cleaner Fuel for Industrial Uses :</p> <p>Currently industries are using Coal/ Petro Coke/Wood and FO/LDO/LSHS as a fuel which emits SPM and SO₂ and other pollutants. If CNG is made available to industries the RSPM, SO₂ will be reduced and Ambient Air Quality will be improved.</p> <p>Board has given NOC to IGL & Adani Group to provide CNG in Ghaziabad for vehicles as well as industrial & domestic use. These companies need to expedite there distribution network for the same at the earliest.</p>	Gas and Oil Companies	Gas & Oil Companies to assess the demand for industries & start supplying CNG to industries within 1.5 Year.	CNG supply has been started by M/s Indraprastha Gas Ltd. and in the first phase, Air Polluting units of Sahibabad Industrial Area have taken Gas connection and have switches to CNG as industrial fuel. 10 units have sent interest letter for CNG connection.
c)	<p>Clean fuel for vehicles:</p> <ul style="list-style-type: none"> ➤ At present 02 CNG stations are operational and are supplying approximately 7000 Kg/day of CNG for commercial vehicles & rest most of the vehicles are using Diesel, Petrol. ➤ Board has given NOC to IGL & Adani Group to provide CNG in Ghaziabad for vehicles as well as industrial & domestic use. ➤ These companies need to expedite there distribution network for the same. ➤ Diesel Commercial Old vehicles should be phased out. 	Gas Companies RTO	01 year / As per plan submitted by Gas agencies. As per approved schedule for phasing out of the vehicle. To be implemented by RTO with immediate effect.	CNG supply is being done through 03 Gas filling station. 10 additional CNG filling stations are proposed by the end of 2011. Only BS IV compliant vehicles are registered by Transport Department in Ghaziabad. Old Diesel driven vehicles are phased out.
d)	<p>Installation of NAAMP Stations</p> <p>At present 02 manual AAQM Stations are operational in Ghaziabad but they need to be upgraded to monitor RSPM and PM_{2.5} as per new AAQM Standard. Present station is out of order.</p> <ul style="list-style-type: none"> ➤ 02 continuous AAQM Stations need to be set up.(01 at 	UPPCB and CPCB	Survey for Industrial Area	Being done as per schedule.

	UPPCB Vasundhara Office & 01 at Industrial Area)		station to be done and Proposal for 02 continuous AAQM to be send by UPPCB to CPCB & to set up in 01 Year.	
	➤ Ambient Air Quality in critical Industrial Zones to be monitored manually once in every 02 months on 24 hours basis by UPPCB.	UPPCB	Every 02 Months.	Will be done as per schedule.
e)	Display of AAQM data On line display of AAQM data at two different locations in the area need to be under taken by Industries Association and UPPCB	UPPCB, CPCB Proposal to be made by UPPCB & sent to CPCB	1.5 Years	Will be done as per schedule.
f)	Use of Cleaner fuel Time frame to be chalked out by RTO for conversion of all commercial vehicles such as Auto, Bus & Vikram into CNG.	RTO in consultation with Gas Companies	01 Year	Will be done as per schedule.
g)	Development of Green Belt UPSIDC & Industries should develop green belt from 20% to 33% of the total area.	UPSIDC & Industries	Ongoing	Will be done as per schedule.
h)	Monitoring of D.G Sets: Installation of Acoustic Enclosure with required APCS and adequate stack height in Old D G Sets to be ensured. New D.G.Sets to be of silent type.	UPPCB	1.5 Year	Will be done as per schedule.
3)	LAND POLLUTION			
a)	Soil Testing Soil testing in all 22 industrial clusters of Ghaziabad is proposed to be done for different metals like Pb, Cr, Cu, Fe etc. twice a year through recognise laboratory.	UPPCB	01 Year	Will be done as per schedule through recognized laboratory.
b)	Study of impact on Human Health of Water & Air Pollutants in Ghaziabad.	IITR (Earlier ITRC) / Any other designated Agency	02 Year	Will be done as per schedule after getting TOR from CPCB.

c)	<p>Municipal solid waste Disposal</p> <ul style="list-style-type: none"> ➤ At present Municipal solid waste is disposed as landfill in low lying areas. Authority should develop proper MSW facility as per MSW Rules at Proper site. ➤ Upcoming High Rise Buildings, Commercial Project, Educational Institution, Multi Plexes, Town ship & Building Projects are major source of Municipal Solid Waste ➤ Such projects must ensure setting up of in house MSW disposal facilities as per MSW Rules & ensure compliance of the conditions of the Environment Clearance and NOC from PCB 	<p>Nagar Nigam</p> <p>Project proponent to give compliance report to UPPCB.</p> <p>Individual project proponent.</p>	<p>01 year</p> <p>Every 3 months</p> <p>With immediate effect.</p>	<p>Being done by Nagar Nigam Ghaziabad.</p> <p>Direction issued while issuing NOC.</p> <p>Direction issued while issuing NOC.</p>
----	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------