



MNR DENTAL COLLEGE AND HOSPITAL

"NAAC ACCREDITED"

(Recognized by MH&FW, Govt. of India & Affiliated to KNR University of Health Sciences)

MNR Nagar, Narsapur Road, Fasalwadi, Sangareddy 502294

Green Campus Initiatives of the Institute Geotagged Photographs







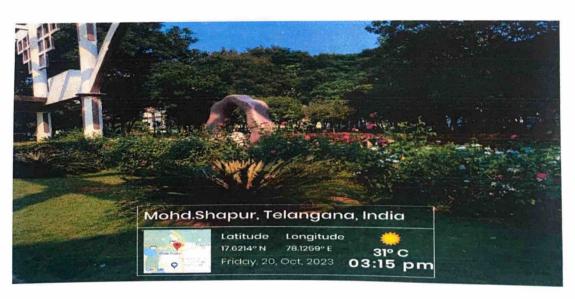
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MNR Nagar, Fasalwadi, Sangareddy- 502 294, Telangana State, India

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LANDSCAPING WITH TREES AND PLANTS

IQAC COORDINATOR
Coordinator
I.Q.A.C.
MNR Dental College & Hospita

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MNR Dental College & Hospital
MNR Nagar, Narsapur Road,
SANGAREDBY Dist.-502 294 (f.s.)

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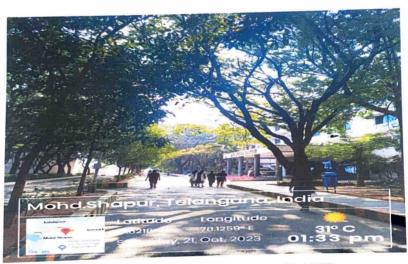
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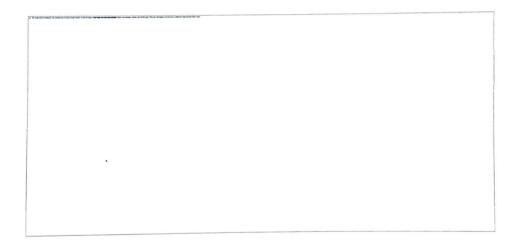




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GREEN CAMPUS Reports



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GREEN AUDIT REPORT

GREENAUDIT REPORT 2021-2022

MNR Dental College & Hospital



Prepared By: Audit Team, Global Management Certification Services Pvt. Ltd.

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thecollege

- > To document the waste disposalsystem
- > To estimate the Energy requirements of the college
- > To report the expenditure on green initiatives during the last fiveyears

METHODOLOGY:

The purpose of the green audit of MNR is to ensure that the practices followed in the campus are in accordance with the Green Policy of the country. The methodology includes: collection of data, physical inspection of the campus, observation and review of the documentation and data analysis.

ABOUT THE COLLEGE:

MNR Dental College is one of the prestigious institutions of MNR Educational Trust, Sangareddy, Telangana State. It was founded in 2006 with an undergraduate course in Dentistry, having an annual intake of 100 students. It is affiliated with the KNR University of Health Sciences, Warangal, Telangana State, and approved by the Dental Council of India, New Delhi and the Ministry of Health & Family Welfare, Govt. of India as per the notification No.V.12017/33/2004-DE, dated 6 April 2011.

The college received NAAC accreditation in the year 2017. The genesis of MNR Dental College lies in our conviction of creating an institution of excellence committed to Dental education, treatment, and research. The institute aims to create professionals with innovative approaches and new strategies at their hands.

At MNR Dental College, we try to inculcate scientific aptitude amongst the students through excellent laboratory training, classroom, and clinical teaching with our 760-bedded Medical College & Hospital. The faculty strives hard for the overall development of tomorrow's upcoming professionals. Nurtured with the special care and concern of the faculty members, MNR is marching towards the forefront in the field of Dentistry.

It has evolved into a beautiful paradise, which not only hones the skills of budding professionals but also provides the perfect and ideal environment for anyone who comes to us to quench their thirst for knowledge. MNR welcomes every prospective student with open hands to be part of our journey and discover a new world of skill and knowledge

The modern Dental hospital features state-of-the-art dental care facilities with highly experienced doctors and efficient staff. The Dental Hospital is equipped with specialized dental pre-clinical and clinical departments, including Oral Medicine and Radiology, Oral Surgery, Orthodontics, Periodontics, Pedodontics, Prosthodontics, Conservative and Endodontics, Oral pathology & microbiology, Public Health Dentistry.

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VISION & MISSION STATEMENT:

Vision

The vision statement of MNR Medical College reflects our steadfastness to be at the forefront of providing quality education that enriches lives and eventually shapes the future of our nation. To be a Medical College where students will get an excellent education in medicine, maximum exposure to research, and equipped for excellence in patient care. It also envisions serving humanity by creating socially responsible, competent, and empathetic members of society for societal development.

To evolve into a center of excellence, giving high-quality training for Education, Healthcare, and Technology to enrich lives.

Strive to emerge as a center of excellence by continuing with a special focus on research and development.

To be globally recognized as student-centric and synonymous with quality education and competence in various fields to produce successful professionals.

To be compassionate in healthcare along with the emphasis on patient-centered care with quality service through education and advanced innovative practices.

To educate and shape a new generation of students equipped to serve and face any challenges in this progressing dynamic world of augmented and virtual reality.

To teach, train and instill in students emotional excellence, social consciousness, professional commitment, and ethical values so they can contribute and serve the world in better ways.

PRINCIPAL

Mission

MNR Medical College's mission is to provide a student-centric learning environment. To educate and train students to become future medical professionals who have excellent academic knowledge, who can compete in the highest levels, and are committed to serving, guided by professional ethics and compassion. It aims to impact society on regional, national, and global levels. Our innovative, dedicated, and highly qualified pedagogy are focused and determined to make the mission possible. It also aims to provide student-centric learning environment with transformative and multi-faceted educational experience. Students not only learn but are invited to create new ideas.

Promote research and development and shape the students by honing their innate skills so that they have the ability and readiness to develop entrepreneurship.

Work out knowledge enhancement programs for students for societal development.

Instill leadership skills and overall personality development among students, addressing their psychological and spiritual needs.

Provide excellent state-of-the-art infrastructure, laboratories, workshops, libraries, research centers, and gym facilities.

To contribute to the needs of society by shaping students through high-quality student-centric education and to be compassionate in healthcare along with the emphasis on patient-centered care through quality service.

To educate and shape competitive and emotionally balanced professionals with strong social consciousness.

To instill self-actualization in students and encourage them to find ways and methods to achieve it on their own.

GREEN AUDITING:

The college has adopted the 'Green Campus' system for environmental conservation and sustainability. There are three main pillars i.e. zero environmental foot print, positive impact on occupant health and performance and 100% graduates demonstrating environmental literacy. The goal is to reduce CO₂ emission, energy and water use, while creating atmosphere where students can learn and be healthy.

LAND USE ANALYSIS, MNR:

GENERAL OVERVIEW OF THE CONCEPT OF LANDUSE

Land use refers to man's activities and the various uses which are carried on and derived from land. Viewing the earth from space, it is now very crucial in man's activities on natural resource. In situations of rapid changes in land use, observations of the Earth from space give the information of human activities and utilization of the landscape.

Remote sensing and GIS techniques are now providing new tools for advanced land use mapping and planning. The collection of remotely sensed data facilitates the synoptic analyses of earth system, functions, patterning, and change in the local, regional as well as at global scales over time. Satellite imagery particularly is a valuable tool for generating land use map.

METHODOLOGY ADOPTED FOR LAND USE MAPPING

Three types of data that are GPS points, field survey data and Google earth data for Geo referencing have been used in this study. Land use map of the study area have been prepared using the above three types of data with the help of ArcGis Prosoftware.

DATA PROCESSING AND ANALYSIS

Land use map preparation is executed through the following steps:

Acquisition of data, Geo-coding and Geo referencing of satellite imageries by extracting the ground control points. Supervised classification was carried out with the aid of ground truth data collected during field survey. Scanning and digitization of maps and editing of all the Georeferenced maps were done using GIS. Data manipulation and analysis and linking the spatial data with the attribute data for creation of topology was carried out using GIS software. Creation of GIS output in the form of land use map showing various land use have been prepared.

Therefore, attempt has been made in this study to map land use for MNR with a view to detect the land consumption in the built-up land area using both remote sensing and GIS techniques.

GEOGRAPHICAL LOCATION WITH CAMPUS MAP IN SCALE

The college has a sprawling pollution-free campus spread over 100 acres of integrated campus located at MNR Nagar, Fasalwadi, Narsapur Road, Sangareddy, Telangana State, India. It has an ideal geographical location with the proximity to the important cities of the region i.e. Karnataka, Telangana, Maharashtra.



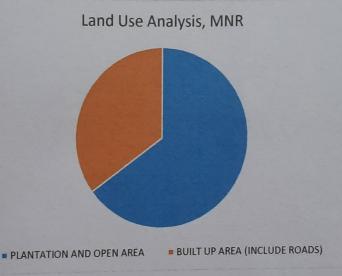
Photo 1: Google Map of Campus



Photo 2: Aerial View of College Campus Part 2 (Source GoogleEar

LAND USE DATA OF MNR, SANGAREDDY

CATEGORIES OF LAND USE	AREA (m²)
PLANTATION AND OPEN AREA	26299
BUILT UP AREA (INCLUDE ROADS)	14161
TOTAL AREA	40460



The total area of MNR is $40,460~\text{m}^2$ out of which the built up area (include Roads) is 35% (i.e $14161~\text{m}^2$) and plantation and open area is 65% (i.e. $26299~\text{m}^2$).

LAND USE (BUILT UP AREA) ANALYSIS:

The built up area of 35% (i.e 14161 m^2) consists of the following regions as stated below for land consumption in built up area of MNR:

The Southern region of MNR Campus is densely built up having academic block, Knowledge Resource Centre,. The Eastern region consists of Cricket ground, Gymnasium and sports complex. The Northern region consists of Canteen and Workshops. The central region consists of Major auditorium. Girls and boys hostels are in the extreme eastern region.

FINDINGS:

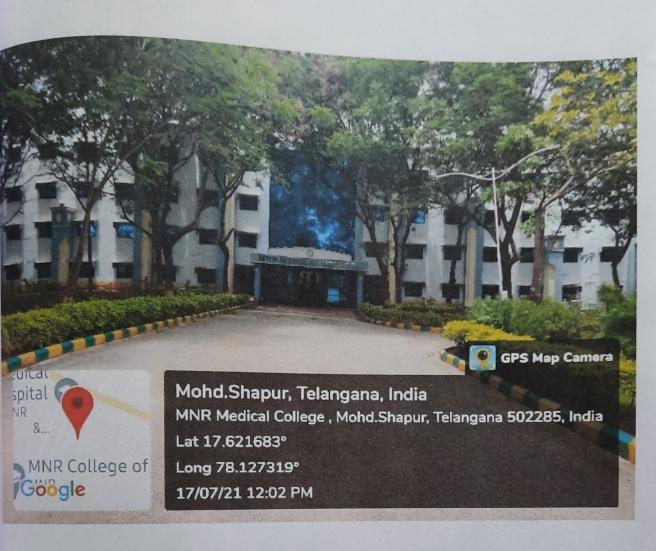
MNR Campus has an eco-friendly environment. It has a long legacy of healthy environmental practices including periodic plantation, their preservation and maintenance. Its land use is such that about 65% of the total area is occupied by open land and plantation that generates a better and sustainable campus environment.

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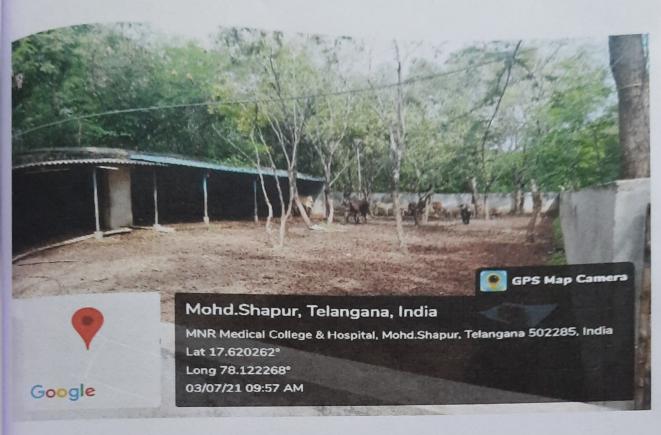
TREE DIVERSITY OF MNR, Sangareddy:

MNR is within the geo-position between latitude 17°37'21" N and longitude 78°07'35" E near, hyderabad, Sanga reddy, India. It encompasses an area of about 66 Acres. The area is immensely diverse with a variety of tree species performing a variety of functions. Most of these tree species are planted in different periods of time through various plantation programmes organised by the authority and have become an integral part of the campus. The trees of the campus have increased the quality of life, not only the campus fraternity but also the people around of the campus in terms of contributing to our environment by providing oxygen, improving air quality, climate amelioration, conservation of water, preserving soil, and supporting wildlife, controlling climate by moderating the effects of the sun, rain and wind. Leaves absorb and filter the sun's radiant energy, keeping things cool in summer. Many spices of birds are dependent on these trees mainly for food and shelter. Nectar of flowers and plants is a favourite of birds and many insects. Leaf covered branches keep many animals, such as birds and squirrels, out of reach of predators. Different species display a seemingly endless variety of shapes, forms, texture and vibrant colours. Even individual trees vary their appearance throughout the course of the year as the seasons change. The strength, long lifespan and regal stature of trees give them a monument - like quality. They also remind us the glorious history of MNR and our institution in particular. We often make an emotional connection with these trees and sometime become personally attached to the ones that we see every day. A thick belt of large shady trees in the periphery of the campus have found to be bringing down noise and cut down dust and storms. The following are the tree species with whom we are being attached-





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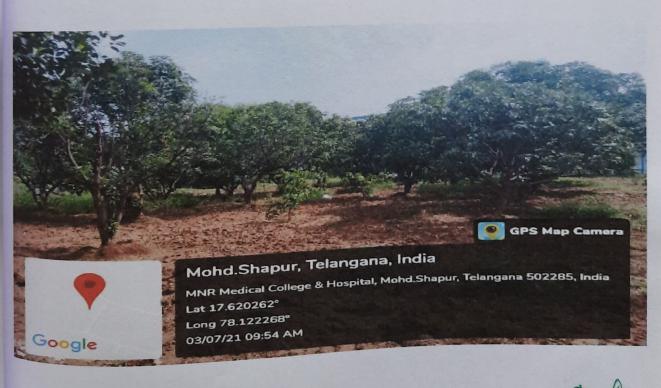


Table: List of tree species of MNR, Sangareddy

S.No.	Botanical Name	Family	Common Name	
1	Mangifera indica	Anacardiaceae		
2	Alstonia Scholaris	Apocynaceae	Alstonia	
3	Tabernaemontanadivaricata	Apocynaceae	Crape jasmine	
4	Araucaria heterophylla	Araucariaceae	Christmas Tree	
5	Hyophorbe lagenicaulis	Arecaceae	Bottle Palm	
6	Roystonea regia	Arecaceae	Cuban royal palm	
7	Phoenix sylvestris	Arecaceae	Badela Palm	
8	Platycladusorientalis	Cupressaceae	Oriental thuja	
9	Saraca asoca	<u>Fabaceae</u>	Ashoka	
10	Dalbergia sissoo	Fabaceae	Sissu / Tali	
11	Vachellia nilotica	Fabaceae	Kikar	
12	Cassia fistula	Fabaceae	Golden shower tree	
13	Delonix regia	<u>Fabaceae</u>	Royal Poinciana	
14	Tamarindus indica	Fabaceae	Tamarind	
15	Tectona grandis	Lamiaceae	Sagwan	
16	Punica granatum	Lythraceae	Pomegranate	
17	Chukrasia velutina	Meliaceae	Chukrasia tabularis	
18	Azadirachta indica	Meliaceae	Neem	
19	Melia azedarach	Meliaceae	umbrella tree	
20	Toona ciliate	Meliaceae	Tun	

21	Ficus religiosa	Moraceae	Peepal
22	Syzygium cumini	Myrtaceae	Jamun
23	Psidium	Myrtaceae	Gauva
24	Eucalypts	Myrtaceae	Safeda
25	Phyllanthus emblica	Phyllanthaceae	Gooseberry
26	Bambusoideae	<u>Poaceae</u>	Bamboo
27	Grevillea robusta	Proteaceae	Silver Oak
28	Ziziphus mauritiana	Rhamnaceae	Ber
29	Rosa	Rosaceae	Rose
30	Citrus limetta	Rutaceae	Mausambi
31	Aegle marmelos	Rutaceae	wood apple
32	Populus	Salicaceae	Poplar
33	Mimusops elengi	Sapotaceae	Maulsari
34	Ficus benjamina	Fig family	Faux
35	Bugàl Bael		Bugal Bael
36	Ficus Benghalensis	Moraceae	Barota
37	Nemesia		Nemesia
38	Rakh Manjan		Rakh Manjan
39	Red Faux		Red Faux
40	Mimusops	Sapotaceae	Sari
41	Flower Faux		Flower Faux
42	Gul Lakkar		Gul Lakkar

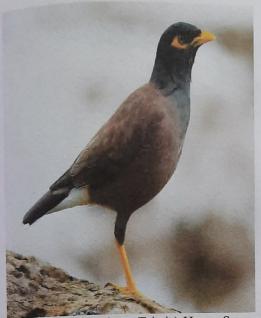


FAUNAL DIVERSITY IN MNR CAMPUS:

MNR is located in District of Sangareddy, Near Hyderabad. Indian State of Telangana. The highest temperature is recorded 42°C just prior to the onset of monsoon (around May- early June). Summer rain is normal, and is principally caused from late June to August by the moisture-laden South-West Monsoon, on striking the Himalayan foothills of the north. The climatic condition of the Sangareddy district as a whole and MNR in particular is very suitable for a wide variety of flora and fauna to support its rich biodiversity. The faunal Diversity of MNR campus has been studied and documented as below:

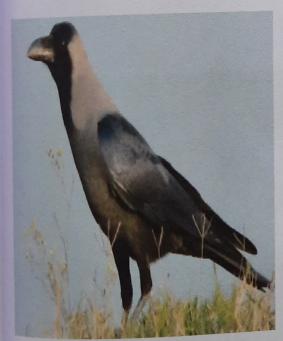
Table: Common and Scientific names of birds and animals

S.No	Common Name	Scientific Name			
1.	Common Myna	Acridotheres Tristis			
2.	Bank Myna	Acridotheres Ginginianus			
3.	House Sparrow	Passer Domesticus			
4.	House Crow	Corvus Splendens			
5.	Cuckoo	Cuculidae			
6.	Snake	Naja Naja			
7.	Yellow Wasp	Ropalidia Marginata			
8.	Butter Fly	Danaus Genutia			
9.	Common Woodshrike	Tephrodornis Pondicerianus			
10.	Pied Myna	Gracupica Contra			
11.	Red-Vented Bulbul	Pycnonotus Cafer			
12.	Skylark	Aluda Gulgula			
13.	Garden Tiger Moth	Arctia Caja			
14.	Little Owl	Athene Brama			
15.	Oleander Moth	Syntomeida Epilais			
16.	Slender Skimmer	Orthetrum Sabina			





Common Myna(AcridotheresTristis) House Sparrow (PasserDomesticus)



House Crow(Corvus Splendens)



Cuckoo(Cuculidae)

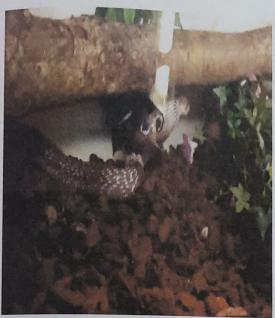


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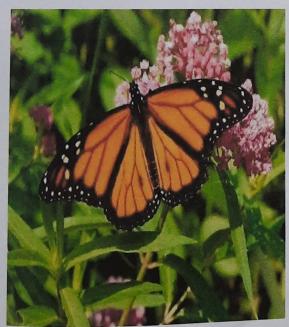
SANGAREDDY Dist. - 502 294 (T.S.)



Snake(Naja Naja)



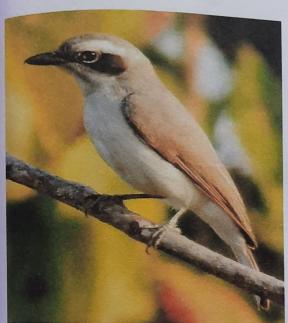
Yellow Wasp (RopalidiaMarginata)



Butter Fly(Danaus Genutia)



Beetle insect on a hibiscusflower



Common Woodshrike (Tephrodornis Pondicerianus)



Pied Myna (GracupicaContra)



Red-Vented Bulbul(PycnonotusCafer)



Skylark (AludaGulgula)



Garden Tiger Moth(ArctiaCaja)



Little Owl (AtheneBrama)



Oleander Moth(SyntomeidaEpilais)



Slender Skimmer (OrthetrumSabina)

WEATHER DATA OF MNR: MNR Campus, Sangareddy (India Location: latitude 17°37′21″ N and longitude 78°07′35″ E)

In MNR Campus, the climate is warm and temperate. The summers are much rainier than the winters in MNR. The average annual temperature in MNR is 24.3 °C. and precipitation level is about 760 mm.

The driest month is generally November. There is 4 mm of precipitation in November. The greatest amount of precipitation occurs in July, with an average of 256 mm. With an average of 33.6 °C, June is the warmest month. The lowest average temperatures in the year occur in January, when it is around 12.3 °C. The precipitation varies 252 mm between the driest month and the wettest month. The variation in temperatures throughout the year is 20.3 °C.

WEATHER DATA MONTH WISE MNR Campus

Temperature\Month	January	February	March	April	May	June	July	August	September	October	November	December
Avg. Temp. (°C)	13.3	16.2	21.2	27.3	32.3	33.6	30.6	29.5	29	24.9	19.2	14.8
Min. Temp (°C)	6.6	8.9	13.5	19	24.2	26.9	26.2	25.5	23.6	17.2	10.3	6.9
Max. Temp (°C)	20.1	23.6	29	35.7	40.4	40.4	35.1	33.6	34.5	32.7	28.2	22.8
Avg. Temp (°F)	55.9	61.2	70.2	81.1	90.1	92,5	87.1	85.1	84.2	76.8	66.6	58.6
Min. Temp (°F)	43.9	48.0	56.3	66.2	75.6	80.4	79.2	77.9	74.5	63,0	50,5	44.4
Max. Temp (°F)	68.2	74.5	84.2	96.3	104.7	104.7	95.2	92.5	94.1	90.9	82.8	73.0
Precipitation / Rainfall (mm)	32	26	26	6	11	37	256	192	132	35	4	13

The geographical co-ordinates of MNR are latitude 17⁰37'21" N and longitude 78⁰07'35" E. The campus has an average altitude of 1758.5 feet or 536 meters from the average sea level. The erstwhile land of MNR was very much feasible for flowers cultivation.

The climatic conditions bear a strong resemblance with the other cities in the southern part of India. The summers are usually hot and the winters are very cold. The summers are prevalent during the months of March to September with April and May being the hottest months. The winter is prevalent from the month of November till the month of March. There is onset of Monsoon in June and from mid of June till September one experiences the transitional weather.

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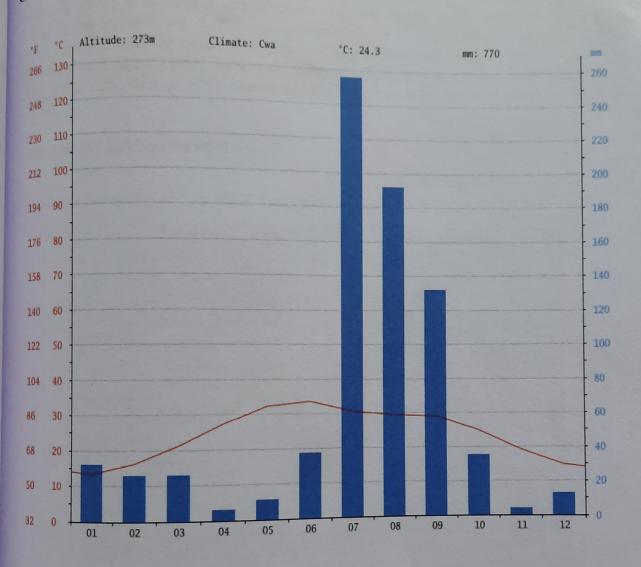
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CLIMATE GRAPH MONTH WISE MNR



AIR QUALITY IN MNR:

The ambient air quality data for MNR for the last one year shows that there are very less polluted particles in ambient air; AQI for SO₂ & NO_x parameters are within the range of Indian living standards, there are a number of factors responsible for this cleanliness, calmness and serenity in this area. Firstly, population which is most responsible for all the problems and hurdles in smooth living is lowest here of all the districts of TS. Secondly, in this area more trees have been planted as compared to other cities. Furthermore, no air polluting industry is established here not even in a radius of 5 Km of MNR area. The NH is also approximately 5 kilometres away from MNR, which might be

responsible for heavy density traffic throughout the year and thus might be causing lot of vehicular responsible for heavy density traffic throughout the year and thus might be causing lot of vehicular replies as well as a lot of dust emissions due to the movement of vehicular traffic. Therefore, the motion air quality of MNR Area falls in between moderate to rich quality state. The TS Pollution control Board is pondering over the various possibilities to reduce the air pollution for the improvement of ambient air quality with respect to AQI is concerned. However, the annual average value of PM10, SO2, NOx in the ambient air quality of campus falls in the range of 50-62 μg/m³, 3-5 μg/m³, 10-12 μg/m³ for most of the months, as such, the graded response action plan to eradicate the problem

AIR QUALITY DETERMINATION

Satisfactory air quality index in MNR, Sangareddy, India during January is as follows:

Parameter	Result (Range)			
NO ₂	25.4 μg/m³, AQI 26 Very Good			
NO	10.09 μg/m³, AQI 10 Good			
O ₃	31.49 μg/m³, AQI 31 Good			
PM2.5	28.13 μg/m³, AQI 28 Good			
PM10	77.2 μg/m³, AQI 79 Satisfactory			
CO	35.0 μg/m³, AQI 18			
Humidity	56.0 %			
Barometric Pressure	1013 millibar or hPa			
Wind Speed	10-15 m/s			
Wind Direction	28.0013 degrees			
Sun Rise	06:28 AM			
Sun Set	05:56 PM			
Moonrise	07:05 PM			
Moonset	07:31 AM			

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WATER ANALYSIS REPORT OF MNR:

Water quality testing is important because it identifies contaminants and prevents water- borne diseases. Drinking or using contaminated water can result in severe illness or death. That is why it is important to ensure that drinking water is safe, clean and free from bacteria and disease.

The parameters for water quality are determined by the intended use. Work in the area of water quality tends to be focused on water that is treated for human consumption, or in the environment.

Drinking water indicators:

The following is a list of indicators often measured by situational category:

- > Alkalinity
- > Color of water
- > pHvalue
- Taste and odor (geosmin, 2-Methylisoborneol (MIB), etc.)
- Dissolved metals and salts (sodium, chloride, potassium, calcium, manganese, magnesium)
- Microorganisms such as fecal coliform bacteria (Escherichia coli), Cryptosporidium, and Giardia lamblia; see Bacteriological wateranalysis
- Dissolved metals and metalloids (lead, mercury, arsenic, etc.)
- Dissolved organics: colored dissolved organic matter (CDOM), dissolved organic carbon(DOC)
- > Heavymetals



NOISE LEVEL IN THE SURROUNDING OF MNR:

The human ear is constantly being assailed by man-made sounds from all sides, and there remain few places in populous areas where relative quiet prevails. There are two basic properties of sound:

- > Loudnessand
- > Frequency.

Loudness is the strength of sensation of sound perceived by the individual. It is measured in terms of Decibels. Just audible sound is about 10 dB, a whisper about 20 dB, library place 30 dB, normal conversation about 35-60 dB, heavy street traffic 60-0 dB, boiler factories 120 dB, jet planes during take-off is about 150 dB, rocket engine about 180 dB. The loudest sound a person can stand without much discomfort is about 80 dB. Sounds beyond 80 dB can be safely regarded as Pollutant as it harms hearing system. The WHO has fixed 45 dB as the safe noise level for a city. For international standards a noise level up to 65 dB is considered tolerate. Loudness is also expressed in sones. One sone equals the loudness of 40 dB sound pressure at 1000 Hz. Frequency is defined as the number of vibration per second. It is denoted as Hertz(Hz).

MATERIALS, STUDY AREA & METHODS

Noise level meter or noise measuring app, Noise test pro (version: 1.0.2), was used to measure the noise level. Noise test pro detect of any noise, music or sound in your surroundings. It will tell you maximum, minimum and average decibel



Noise Test 54

The highest dB:61 dB

The average dB:52 dB

The lowest dB:27 dB

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Figure: Noise Measurement by Noise Test Pro App

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MEASUREMENT PROCEDURE

MEASURE level was recorded at the different Important Locations of MNR. At each spot, the measurements were taken for 60 seconds during day time (6 AM- 6 PM) and noted down the measurements. Screen shots of the measurements of noise were taken immediately on the app at the time of 60th second of each measurement.

RESULTS

The results of the experiments at different places have been tabulated in the following table: Table 1: Measurements of Noise in and around MNR:

PLACE	MEASUREMENTS (Duration in Sec.)	MINIMUM (dBA)	Maximum (dBA)	AVERAGE (dBA)
Canteen	60	74	90	85
Library	60	51	85	65
HospitalArea	60	57	84	78
Hostels Lab	60	45	89	72
Admin Block Area	60	50	81	73
Principal Office	60	35	77	68
Auditorium	60	53	75	71
Ground 2	60	56	90	68
Generator Room	60	53	89	75
Gymnasium	60	68	82	76
College Front Gate	60	50.7	78.0	71.0
College Back Gate	60	54	75.9	73.5

Source: Data collected by Third Party Lab in the presence of GMCSPL Auditors. After the study, the measurements of noise have been recorded in and outside of

MNR area:

Inside the

Campus: 35-90 dBA, Outside the Campus: 54-93

dBA

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MNR Dental College & Hospital

MNR Nagar, Narsapur Road,

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WASTE DISPOSAL OF MNR:

Waste disposal are the activities and actions required to manage waste from its inception to its final disposal. This includes the collection, transport, treatment and disposal of waste, together with monitoring and regulation of the waste managementprocess.

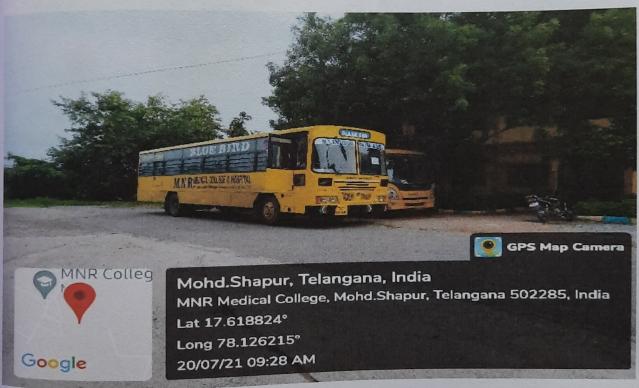
The waste from all around the college is separated daily as wet and dry waste in different bags which are disposed separately. Dry waste includes paper, cardboard, glass tin cans etc. on the other hand; wet waste refers to organic waste such as vegetable peds, left-over food etc. Separation of waste is essential as the amount of waste being generated today causes immense problem. The material was composted and evaluated as a fertilizing material. Disposal of these waste results in the production of good quality organic manure that can be used as soil amendments and source of plant nutrients.

With smart initiatives like "Think Green Campus Model", waste management is helping colleges and universities to achieve a higher level of environmental performance. By reusing or recycling we are contributing to the conservation of natural resources, saving energy, helping to protect the environment, reducing landfill. We will also reduce our impact on the environment by minimizing the carbon emissions associated with both disposing of old products and obtaining new ones. MNR adopts environment friendly practices and takes necessary actions such as – energy conservation, waste recycling, carbon neutral etc. The biological reusable wastes are processed as organic manure for the plants available in the college campus and the other solid waste generated in the college campus is taken to the community bin of MNR municipality for recycling and disposal.



TRANSPORTATION AT MNR:

Being a largest campus in the region, MNR uses a fleet of buses for Being transportation of the students & staff from the around locations of Hyderabad. The college is dedicated to provide its students and staff all the comfort and convenience to help them to achieve their targets. There are the clear and certifiable environmental benefits to higher bus ridership. By utilizing bus transportation, we reduce our automobile use and thereby help to promote clean air. It can convey many more people in much less space than individual automobiles, which helps to keep traffic congestion lower, which in turn reduces air pollution from idling vehicles, and helps riders avoid the stress that comes from daily driving in highly congested areas. By moving people more efficiently, bus transit produces significantly less air pollution per passenger mile than a standard car carrying a single driver. Buses emit approximate 20% less carbon monoxide, 10% as much hydrocarbons, and 75% as much nitrogen oxides per passenger mile as an automobile with a single occupant. Also with in campus no diesel 4 wheeler vehicles are allowed. MNR organized battery operated 2 and 4 wheelers vehicles with in the Camp



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MNR Nagar, Narsapur Road,
MNR Nagar, Narsapur Road,
MNR Nagar, 1902 294 (T.S.)





MNR Dental College & Hospital
MNR Nagar, Narsapur Road,
SANGARO DY Dist. - 502 294 (T.S.)

ELECTRICAL POWER CONSUMPTION AT MNR:

MNR, being one of the largest campus of Hyderabad, consumes on an average filament bulbs, CFL bulbs and tube lights by low energy consuming LED bulbs and LED tubes and bulky high-power consuming fans by energy efficient fans in order to keep the electricity consumption of the college as low as possible.

In addition to making Environmental Studies a very vital subject in our syllabus, MNR has gone a step further by putting that theory into practice. The college has installed three sets of solar panels, on the roof of block. MNR with the installation of 20 KW solar rooftop plant in collaboration with External agency was able to offset 20% of its energy usage from the state grid thus moving towards a more reliable and greener option and reducing its carbonfootprint.



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MNR Dental College & Hospital MNR Nagar, Narsapur Road, ANGAREDDY Dist. - 502 294 (T.S. EXPENDITURE ON GREEN INITIATIVES DURING THE LAST THREE YEARS:

Financial Year	Tree plantation (Amount in Rs)	Gardening & lawn Work (Tractor running & Maintenance) Rs.	Sewerage Treatment Plant Rs.	Purchase of LEDs Rs.	Total Rs.
2021-22(R)	31236	101245	20824		153305
2020 - 21	67478	137482	20645	712628.6	938233.62
2019 - 20	58424	131547	20349	847871.4	1058191.4

	Team Leader	K S N Prasad	
Audit Team	Auditor[s]	Ch. Rama Rao, P.Yadgiri & K.V.Murthy	
Audit Dates	11.01.2022 and 1	11.01.2022 and 12.01.2022	

Name of the Lead Auditors and Sign

Name: Mr.K.S.N.Prasad

Signature:

Date: 12.01.22

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MNR Dental College & Hospital
MNR Nagar, Narsapur Road,
SANGAPEDDY List. - 502 294 (F.S.)







No. 244, 1st Cross, BSK 3rd Stage, Near Katriguppe Bigbazar Bangalore – 560085

ENVIRONMENT MANAGEMENT SYSTEM ASSESSMENT REPORT FOR MNR GROUP OF INTITUTIONS

SANGAREDDY, TELANGANA





Reg.Office. No. 244, 1st Cross, BSK 3rd Stage, Near Katriguppe Bigbazar, Bangalore - 560085



Name: M/s. MNR GROUP OF INTITUTIONS

Contact Person: Dr. Kranti

1) Main Block

Date:

REQUIREMENTS	Accorder's Notes of Ohi, at
4.4.5 Control of documents	Assessor's Notes of Objective Evidences / Finding Reference
assuration documents.	The organization has established, implemented and maintains a procedure for controlling all the documents defined under the EMS with respect to approving, reviewing, updating and re-approving. Also ensures that changes and current revision status of documents are identified, relevant versions are available at point of use and the documents are legible and readily identifiable
4.4.1Resources, Roles, Responsibility & Authority	Resources for ensuring compliance with all legal requirements provided and maintained.
	Roles and responsibilities for personnel responsible for implementation of the system documented and maintained.
4.4.2 Competence, awareness and	
training for personnel involved	It has been ensured that personnel performing tasks for or on company
	Behalf that have the potential to cause significant environmental impacts
	Are competent on the basis of appropriate education, training and/or
4.3.1 Relevant Env. Aspects/Impacts	Experience
	Aspects: Impacts
	impacts

spects:	Impacts
Isage of Electricity	Resource Depletion
Isage of Mops & Wipers	Resource Depletion
Jsage of Brooms	Resource Depletion
Isage of Clothes & Saw dust.	Resource Depletion
Isage of Washing Materials	Resource Depletion
Seneration of Waste	
lothes/cotton	Land Contamination
eneration & Disposal of	
Vaste paper,	Land Contamination
eneration of Waste Plastics	
naterials	Land Contamination
Seneration of Waste office	
tationery	Land Contamination

Adequate Environmental measures have been evidenced for the above mentioned aspect and Impact

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PRINCIPAL MNR Dental College & Hospital MNR Nagar La sepur Road. SANCATURE

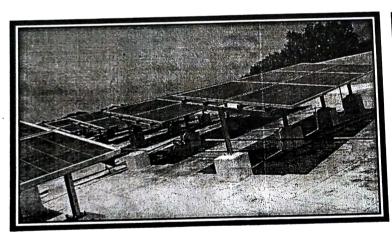
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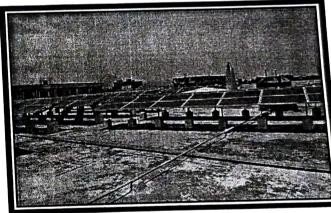
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REQUIREMENTS	Assessor's Notes of Objective Evidences / Finding Reference
4.4.6 Operational Control	Air quality monitored from time to time as verified in report Noise level monitored and recorded.
4.5.1 Monitoring & Measurement	The process results are monitored against objectives and targets.
4.4.3 Internal Communication	Internal communication by floor Coordination Meetings, Display Boards, Internal
4.5.3 Nonconformity, Corrective Action and Preventive Action	Office Memos, circulars. All the System Non conformities recorded in IQA – CAR format.
4.5.4 Control of Records	The organization has established, implemented and maintains all the relevant records for the Identification, storage, protection, retrievate retention and disposal of environmental records.

The college has around 950 solar panels with a capacity of 100KV electricity which is being used for street lights, Admin Block and for all class rooms.





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2) Library

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The oocum deviet urrer are aveadil Resou main Roles the sy	nt revision status of documents a vailable at point of use and the doly identifiable urces for ensuring compliance we tained. Is and responsibilities for personal ystem documented and maintain as been ensured that personnel pulf that have the potential to cause	plemented and maintains all the th respect to approving, g. Also ensures that changes and are identified, relevant versions ocuments are legible and with all legal requirements provided nel responsible for implementation ned. Derforming tasks for or on company se significant environmental impact
maint Roles the sy It has beha are c	tained. s and responsibilities for personing stem documented and maintaing steen ensured that personnel pulf that have the potential to caus	nel responsible for implementation ned. performing tasks for or on company se significant environmental impact
exp e	rience	priate education, training and/or
	Aspects:	Impacts
	Usage of Electricity	Resource Depletion
	Usage of Mops & Wipers	Resource Depletion
	Usage of Brooms	Resource Depletion
	Usage of Clothes & Saw dust.	Resource Depletion
	Usage of Washing Materials	Resource Depletion
	Generation & Disposal of Waste paper.	Land Contamination
	Generation of Waste Plastics materials	Land Contamination
	Generation of Waste office stationery	Land Contamination
		Usage of Mops & Wipers Usage of Brooms Usage of Clothes & Saw dust. Usage of Washing Materials Generation & Disposal of Waste paper. Generation of Waste Plastics materials Generation of Waste office

Reg. Office. No. 244, 1st Cross, BSK 3rd Stage, Near Katriguppe Bigbazar, Bangalore - 560085



REQUIREMENTS	Assessor's Notes of Objective Evidences / Finding Reference
4.4.6 Operational Control	Air quality monitored from time to time as verified in report Noise level monitored and recorded.
4.5.1 Monitoring & Measurement	The process results are monitored against objectives and targets.
4.4.3 Internal Communication	Internal communication by floor Coordination Meetings, Display Boards, Internal Office Memos, circulars.
4.5.3 Nonconformity, Corrective Action and Preventive Action	All the System Non conformities recorded in IQA – CAR format.
4.5.4 Control of Records	The organization has established, implemented and maintains all the relevant records for the Identification, storage, protection retrieval, retention and disposal of environmental records.

Reg. Office. No. 244, 1st Cross, BSK 3rd Stage, Near Katriguppe Bigbazar, Bangalore - 560085



3) Hostel and Canteen.

REQUIREMENTS	Assessor's Notes of Objective Evidences / Finding Reference		
4.4.5 Control of documents	The organization has established, im documents defined under the EMS wing Reviewing, updating and re-approving current revision status of documents are available at point of use and the direadily identifiable	plemented and maintains all the ith respect to approving, g. Also ensures that changes and are identified, relevant versions	
4.4.1Resources, Roles, Responsibility & Authority 4.4.2 Competence, awareness and training for personnel involved 4.3.1 Relevant Env. Aspects/Impacts	Resources for ensuring compliance with all legal requirements provided armaintained. Roles and responsibilities for personnel responsible for implementation of the system documented and maintained. It has been ensured that personnel performing tasks for or on company behalf that have the potential to cause significant environmental impacts are competent on the basis of appropriate education, training and/or experience		
	Aspects:	Impacts	
	Usage of Electricity	Resource Depletion	
	Generation of Smoke	Air Pollution	
	Generation of Noise	Noise Pollution	
	Usage of Clothes & Saw dust.	Resource Depletion	
	Usage of Washing Materials	Resource Depletion	
	Generation & Disposal of Food Waste	Land Contamination	
	Generation of Waste Plastics materials	Land Contamination	
	Usage of water	Depletion of Natural Resources.	
	using Soap Oil	Land Contamination, Water & Air	

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Adequate Environmental measures have been evidenced for

the above mentioned aspect and Impact

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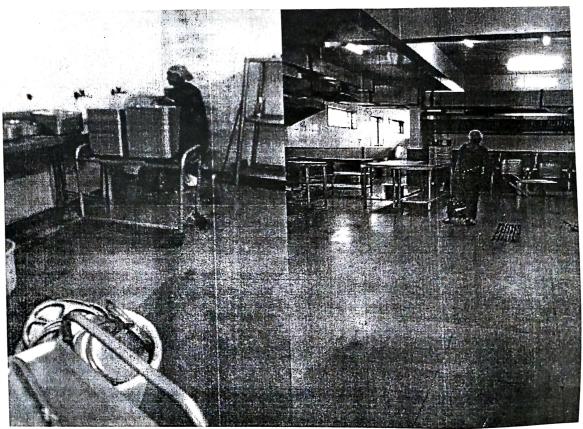
Rangel

Bangalore - 560085



REQUIREMENTS	Assessor's Notes of Objective Evidences / Finding Reference
4.4.6 Operational Control	Assessor's Notes of Contents Air quality monitored from time to time as verified in report Noise level monitored and recorded. Generation of heat at the cooking area measured and monitored.
4.5.1 Monitoring & Measurement	The process results are monitored against objectives and targets.
4.4.3 Internal Communication	Internal communication by floor Coordination Meetings, Display Boards, Internal Office Memos, circulars.
4.5.3 Nonconformity, Corrective Action and Preventive Action	All the System Non conformities recorded in IQA - CAR format.
4.5.4 Control of Records	The organization has established, implemented and maintains all the relevant records for the Identification, storage, protection, retrieval, retention and disposal of environmental records.

The college has a sophisticated kitchen and dining hall with a seating capacity of more than 1000 students



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Reg. Office. No. 244, 1st Cross, BSK 3rd Stage, Near Katriguppe Bigbazar, Bangaloro



4) All Departments. Date:

4.4.5 Control of	Assessor's Notes of Objective Evidences / Finding Reference
4.4.5 Control of documents	The organization has established, implemented and maintains all the documents defined under the EMS with respect to approving, reviewing, updating and re-approving. Also ensures that changes and current revision status of documents are identified, relevant versions are available at point of use and the documents are legible and readily identifiable
4.4.1Resources, Roles, Responsibility & Authority	Resources for ensuring compliance with all legal requirements provided and maintained. Roles and responsibilities for personnel responsible for implementation of the system documented and maintained.
4.4.2 Competence, awareness and	
training for personnel involved	It has been ensured that personnel performing tasks for or on company behalf that have the potential to cause significant environmental impacts
4.3.1 Relevant Env. Aspects/Impacts	are competent on the basis of appropriate education, training and/or experience

Aspects:	Impacts
Usage of Electricity	Resource Depletion
Usage of Mops & Wipers	Resource Depletion
Usage of Brooms	Resource Depletion
Usage of Clothes & Saw dust.	Resource Depletion
Usage of Washing Materials	Resource Depletion
Generation of Waste	Land Cambanain aking
clothes/cotton	Land Contamination
Generation & Disposal of	Land Contamination
Waste paper,	Land Contamination
Generation of Waste Plastics	Land Contamination
materials	Land Containination
Generation of Waste office	Land Contamination
stationery	Lanu Containination

Adequate Environmental measures have been evidenced for the above mentioned aspect and Impact

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Bangalore - 560085



REQUIREMENTS Side record Finding Reference	
4.4.6 Operation	Assessor's Notes of Objective Evidences / Finding Reference
4.4.6 Operational Control	Air quality monitored from time to time as verified in report Noise level monitored and recorded. Generation of heat at the cooking area measured and monitored.
4.5.1 Monitoring & Measurement	The process results are monitored against objectives and targets.
4.4.3 Internal Communication	Internal communication by floor Coordination Meetings, Display Boards, Internal Office Memos, circulars.
4.5.3 Nonconformity, Corrective Action and Preventive Action	All the System Non conformities recorded in IQA - CAR format.
4.5.4 Control of Records	The organization has established, implemented and maintains all the relevant records for the Identification, storage, protection retrieval, retention and disposal of environmental records.