FREQUENTLY ASKED QUESTIONS (FAQs)

STATE POLLUTION CONTROL BOARD, ODISHA

JUNE-2025

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ODISHA

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Air Pollution can be Reduced by

Plant More Trees

Develop Rooftop Gardens

Use Electric Vehicles

Install Rooftop Solar Plants

Use Bicycle/Walking for Shorter Distance

Use Public Transport

Sri Ganesh Ram Singkhuntia
Hon'ble Minister of Forest,
Environment & Climate Change,
Labour & Employees State Insurance,
Govt. of Odisha

I am pleased to learn that the State Pollution Control Board (SPCB) is releasing a comprehensive "Frequently Asked Questions (FAQs)" document on the eve of World Environment Day, 2025. This initiative reflects the Board's commitment towards sensitizing entrepreneurs and the general public about its roles, responsibilities, and regulatory procedures.

This initiative marks a significant step towards greater transparency and environmental awareness. The FAQ is designed to provide a clear, accessible information on pollution control regulations, compliance mechanisms, laid down procedures and the role of various stakeholders in the entire process.

Today, plastic pollution poses a significant threat to our ecosystems, public health and sustainable development. As we work collectively to phase out single-use plastics and promote responsible consumption, and go back to our age old ecofriendly lifestyle, access to accurate information is the key. The FAQ will serve as a valuable resource for citizens, industries, and institutions alike. The Board continues to leverage all possible means, including digital platforms, to ensure transparency and public accessibility of its activities.

I extend my heartfelt congratulations to all officers and employees of the Board for their contribution in devising the excellent booklet.

Let us reaffirm our collective resolve to protect and preserve our environment as a collective responsibility.

I wish, the Board scales new milestones in serving its mandate.

29/5/2025

(Sri Ganesh Ram Singkhuntia)

Sri Manoj Ahuja, IAS
Chief Secretary,
Govt. of Odisha-Cum-Chairman,
SPCB, Odisha

It gives me immense pleasure to share this Frequently Asked Questions (FAQs) Book related to Pollution Control, Environmental Governance and Compliance, to be released on the occasion of World Environment Day, 2025. In a World, where our environment is changing more rapidly than ever; along with the associated regulations; I believe it is important for each of us to pause, reflect and consider: what I can do in a meaningful way?

In recent decades, we have witnessed the impact of pollution on public health and global ecosystems. From hazy skies to affected water bodies, the consequences of rapid industrialization and urbanization have become a growing concern. Addressing these challenges is not the responsibility of one sector - it demands awareness, action and collaboration across communities, industries and Government. The role of State Pollution Control Board (SPCB) is pivotal in managing these concerns through regulatory mechanism.

That's why this book is designed by SPCB to empower citizens, students, professionals and policy makers with clear and concise answers to the most common questions on various types of pollution, its mitigation, corresponding regulations and the responsibility of SPCB. Whether to understand the basics or explore more technical solutions, this compilation will serve as a practical guide and an educational tool.

I urge each of you to take benefit from the pages of this book and commit, in your own way in reducing pollution and promoting sustainability. Together we can create an environment where progress and preservation go hand in hand.

(Sri Manoj Ahuja, IAS)

Sri Satyabrata Sahu, IAS
Addl. Chief Secretary,
FE & CC Dept.,
Govt. of Odisha

I am delighted that State Pollution Control Board is unveiling a comprehensive Frequently Asked Questions (FAQs) Booklet. In today's rapidly evolving landscape, access to a clear, concise, and Frequently Asked Question -accurate information is more vital than ever—especially for entrepreneurs who are the driving force of progress and innovation.

This book is being released on the occasion of World Environment Day, 2025, which carries the crucial theme: "Ending Plastic Pollution."

This publication has been carefully documented to address Frequently Asked Questions, provide clarity on essential environmental topics and guide you through the processes, policies, and services offered by the State Pollution Control Board, Odisha.

Whether you are a budding entrepreneur, an informed citizen, or simply someone seeking guidance, I trust that this resource will serve as a valuable tool in your engagement with the Board and with environmental governance more ease.

We believe that informed individuals make empowered decisions. With that in mind, the dedicated team at SPCB, Odisha has worked diligently to ensure that each response in this book is both informative and easy to understand. This is going to be an engaging volume that explores the intrinsic links between sustainability and future demand. Your feedback is always welcome and we remain committed in updating this resource as new questions and challenges emerge.

(Sri Satyabrata Sahu, IAS)

Mrs. Uma Nanduri, IFS
Member Secretary,
SPCB, Odisha

FOREWORD

Environmental management has become an integral part of sustainable development and responsible industrial practices. The growing pressure on compliance mandated by regulatory bodies makes the users and stakeholders to comply with under the applicable laws and regulations. There is also a need to provide clear, easy to understand and up-to-date guidance to general public and stakeholders across all the sectors coming under the ambit of environmental regulations associated rules, regulations, guidelines, procedures those are required to fulfilled and complied and facilitating them in completing all the formalities / paraphernalia towards statutory compliance.

This publication presents a consolidated set of Frequently Asked Questions (FAQs). The content is based on the latest norms and guidelines issued by the Central Pollution Control Board (CPCB) and the State Pollution Control Board (SPCB), Odisha, MoEF&CC, Govt. of India, FE&CC Department, Govt. of Odisha covering key areas such as air and water pollution control, waste management, environmental monitoring, and reporting.

The objective of this compilation is to clear the doubts and educate the users / stakeholders legal and technical requirements, procedures and to provide practical clarity on day-to-day compliance challenges and associated procedures. Whether for a small enterprise or a large industrial corporate, this document serves as a ready reference to help organizations / users and bringing clarity in environmental governance.

I acknowledge the efforts of all Board Officials and staffs on preparing this report. I am sure this report will be a great help to all the users especially the small and medium sector entrepreneurs towards understanding the statutory obligations and will be a helping hand in fulfilling the requirements in right time, proper form aligned with legal needs.

(Mrs. Uma Nanduri, IFS)

LIST OF ABBREVIATIONS

AAQ	-	Ambient Air Quality
AQI	-	Air Quality Index
ARRS	-	Annual Rate of Replenishment Study
BaP	-	Benzo[a]pyrene
BIS	-	Bureau of Indian Standards
BMC	-	Beach Management Committee
BOD	-	Biochemical Oxygen Demand
CA	-	Chartered Accountant
CAAQMS	-	Continuous Ambient Air Quality Monitoring System
CBWTDF	-	Common Bio-medical Waste Treatment and Disposal Facility
$CaCl_2$	-	Calcium Chloride
CCR	-	Central Control Room
C&D	-	Construction and Demolition
CEMS	-	Continuous Emission Monitoring System
CEPI	-	Comprehensive Environmental Pollution Index
CEQMS	-	Continuous Effluent Quality Monitoring System
CFU	-	Colony Forming Unit
CGWA	-	Central Ground Water Authority
CH_4	-	Methane
CIPET	-	Central Institute of Plastics Engineering & Technology
CMC	-	Coastal Management Cell
CMCE	-	Center for Management of Coastal Ecosystem
CNG	-	Compressed Natural Gas
CO	-	Carbon Monoxide
COD	-	Chemical Oxygen Demand
COPD	-	Chronic Obstructive Pulmonary Disease
CPA	-	Critically Polluted Area

CPC	-	Calcined Pet Coke
CPCB	-	Central Pollution Control Board
CRZ	-	Coastal Regulation Zone
CSIR	-	Council of Scientific and Industrial Research
CSIR-IITR	-	Council of Scientific and Industrial Research-Indian Institute of Toxicology Research
CTE	-	Consent to Establish
CTO	-	Consent to Operate
CZMP	-	Coastal Zone Management Plan
DEMC	-	District Environmental Monitoring Committees
DFO	-	Divisional Forest Officer
DG	-	Diesel Generator
DIC	-	District Industries Centre
DLC	-	District Level Committee
DM	-	District Magistrate
DO	-	Dissolved Oxygen
DPR	-	Detail Project Report
DSR	-	District Survey Report
DTPA	-	Diethylenetriaminepentaacetic Acid
DUDA	-	District Urban Development Agencies
EAC	-	Expert Appraisal Committee
EAQDES	-	Environmental Air Quality Data Entry System
EC	-	Environment Clearance
EIA	-	Environmental Impact Assessment
EIEC	-	Enteroinvasive Escherichia coli
EIN	-	Entrepreneur Identification Number
EM	-	Effective Microorganisms
EMP	-	Environmental Management Plan
EP Act	-	Environment (Protection) Act

EPEC	-	Enteropathogenic Escherichia coli
EPR	-	Extended Producer Responsibility
ERF	-	Environmental Relief Fund
ESP	-	Electrostatic Precipitators
ETEC	-	Enterotoxigenic Escherichia coli
ETP	-	Effluent Treatment Plant
EV	-	Electric Vehicle
E-Waste	-	Electronic Waste
F^-	-	Fluoride
FC	-	Fecal Coliform
FCBTK	-	Fixed Chimney Bull's Trench Kiln
FE&CC	-	Forest, Environment and Climate Change
FO	-	Furnace Oil
GCP	-	Ground Control Point
GHS	-	Globally Harmonized System
GO-SWIFT	-	Government of Odisha- Single Window for Investor Facilitation and Tracking
GPS	-	Global Positioning System
GRIHA	-	Green Rating for Integrated Habitat Assessment
HCE	-	Health Care Establishment
HCl	-	Hydrochloric Acid
HCU	-	Health Care Unit
HD IP	-	High- Definition Internet Protocol
HOWM	-	Hazardous and Other Wastes (Management and Transboundary Movement)
HSD	-	High Speed Diesel
HTL	-	High Tide Line
H&UD	-	Housing & Urban Development
HW	-	Hazardous Waste
IBM	-	Indian Bureau Mines

ICZMP	-	Integrated Coastal Zone Management Project
IIT	-	Indian Institute of Technology
IMMT	-	Institute of Minerals and Materials Technology
IRC	-	Indian Roads Congress
KIIT	-	Kalinga Institute of Industrial Technology
KLD	-	Kiloliters Per Day
KML	-	Keyhole Markup Language
LDO	-	Light Diesel Oil
LEED	-	Leadership in Energy and Environmental Design
LNG	-	Liquefied Natural Gas
LPG	-	Liquefied Petroleum Gas
LSHS	-	Low Sulphur Heavy Stock
LTL	-	Low Tide Line
MMDR	-	Mines and Minerals (Development and Regulation)
MoEF&CC	-	Ministry of Environment, Forest and Climate Change
MPN	-	Most Probable Number
MRF	-	Material Recovery Facilities
MSIHC	-	Manufacture, Storage and Import of Hazardous Chemical
MSL	-	Mean Sea Level
MSW	-	Municipal Solid Waste
NAAQS	-	National Ambient Air Quality Standards
NABET	-	National Accreditation Board for Education and Training
NABL	-	National Accreditation Board for Testing and Calibration Laboratories
NAC	-	Notified Area Council
NAMP	-	National Air Quality Monitoring Programme
NCAP	-	National Clean Air Programme
NCSCM	-	National Centre for Sustainable Coastal Management
NGO	-	Non-Governmental Organization
NGT	-	National Green Tribunal

NH_3	-	Ammonia
NHWTS	-	National Hazardous Waste Tracking System
Ni	-	Nickel
NIPL	-	No Increase in Pollution Load
NIT	-	National Institute of Technology
N_2O	-	Nitrous Oxide
NOC	-	No Objection Certificate
NOx	-	Nitrogen Oxides
NPK	-	Nitrogen, Phosphorus & Potassium
NWMP	-	National Water Quality Monitoring Programme
O_3	-	Ozone
OCEMS	-	Online Continuous Emission Monitoring System
OCMMS	-	Online Consent Management & Monitoring System
OCZMA	-	Odisha Coastal Zone Management Authority
ODOCMMS	-	Odisha Online Consent Management & Monitoring System
OEM	-	Original Equipment Manufacturer
OMMC	-	Odisha Minor Mineral Concession
OPA	-	Other Polluted Area
ORSAC	-	Orissa Remote Sensing Application Centre
ORTPS	-	Odisha Right to Public Services
OSPCB	-	Odisha State Pollution Control Board
OUAT	-	Odisha University of Agriculture & Technology
Pb	-	Lead
PCC	-	Pollution Control Committee
PCP	-	Prevention and Control of Pollution
PI	-	Pollution Index
PIA	-	Polluted Industrial Area
PIBO	-	Producer, Importer, and Brand Owner
PIC	-	Prior Informed Consent

PLI	-	Public Liability Insurance
PM	-	Particulate Matter
PNG	-	Piped Natural Gas
PPP	-	Public -Private Partnership
PRI	-	Panchayat Raj Institution
PRS	-	Polluted River Stretches
PWM	-	Plastic Waste Management
QCI	-	Quality Council of India
R&D	-	Research and Development
RDF	-	Refuse Derived Fuel
RDS	-	Respirable Dust Sampler
RECD	-	Retrofit Emission Control Device
RMC	-	Ready-Mix Concrete
RoM	-	Run-of-Mine
RoR	-	Record of Rights
RT-DAS	-	Real-Time Data Acquisition System
RTO	-	Regional Transport Office
SDS	-	Safety Data Sheet
SEAC	-	State Level Expert Appraisal Committee
SEIAA	-	State Environment Impact Assessment Authority
SHG	-	Self-Help Group
SO_2	-	Sulfur Dioxide
SOP	-	Standard Operating Procedure
SPA	-	Severely Polluted Area
SPCB	-	State Pollution Control Board
STA	-	State Transport Authority
STEC	-	Shiga Toxin-producing Escherichia coli
STLC	-	Soluble Threshold Limit Concentration
STP	-	Sewage Treatment Plant
SUP	-	Single-Use Plastic

SWM	-	Solid Waste Management
TC	-	Total Coliform
TCLP	-	Toxicity Characteristic Leaching Procedure
TDS	-	Total Dissolved Solid
TEA	-	Triethanol Amine
TOR	-	Terms of Reference
TSDF	-	Treatment, Storage, and Disposal Facility
UASB	-	Upflow Anaerobic Sludge Blanket
UDPFI	-	Urban and Regional Development Plans Formulation and Implementation
ULB	-	Urban Local Body
USEPA	-	United States Environmental Protection Agency
UT	-	Union Territory
VOC	-	Volatile Organic Compounds
VSBK	-	Vertical Shaft Brick Kiln
VSSUT	-	Veer Surendra Sai University of Technology
EEE	-	Electrical and Electronic Equipment
WEEE	-	Waste Electrical and Electronic Equipment
WET	-	Waste Extraction Test
WQI	-	Water Quality Index
WR	-	Water Resources
ZLD	-	Zero Liquid Discharge

CONTENTS

1 Constitution of State Pollution Control Board, Odisha

1. **What is the State Pollution Control Board (SPCB), Odisha?**

   The SPCB, Odisha is a statutory body constituted by the State Government to implement environmental laws and ensure pollution control across the state.

2. **Under which law is the SPCB, Odisha constituted?**

   The Board is constituted under Section 4 of the Water (Prevention and Control of Pollution) Act, 1974.

3. **What is the main objective of SPCB, Odisha?**

   To prevent, control, and abate water and air pollution, and to ensure sustainable development of the environment in Odisha.

4. **Who constitutes the SPCB in Odisha?**

   The State Government constitutes the Board through a notification in the Official Gazette.

5. **What is the composition of the SPCB, Odisha?**

   As per the Act, the Board consists of:

   A Chairman (nominated by the State Government)

   A Member Secretary (with knowledge and experience in pollution control; appointed by the State Government)

   Officials representing different State Government departments

   Representatives from local authorities

   Non-officials representing industry, agriculture, trade, etc.

   Representatives of companies or corporations owned by the Government

6. **What is the term of office for Board members of SPCB?**

   Typically, the members hold office for a term of three years, unless otherwise specified by the State Government.

7. **Can the SPCB function independently?**

   Yes. Although constituted by the State, the Board functions as an autonomous statutory body under the Water and Air Acts.

8. **What are the powers of the SPCB, Odisha?**

   Frame rules and policies for pollution control

   Grant or refuse Consent to Establish/Operate

   Monitor and inspect industrial units

Initiate legal action against violators

Advise the Government on environmental matters

9. Where is the headquarters of SPCB, Odisha located?

The headquarters of the Board is in Bhubaneswar, Odisha.

At- Paribesh Bhawan, A/118, Nilakantha Nagar, Unit-VIII,

Bhubaneswar, Odisha.

10. Does SPCB, Odisha collaborate with other agencies?

Yes. The Board works in coordination with:

Central Pollution Control Board (CPCB)

Ministry of Environment, Forest and Climate Change (MoEF & CC)

Local bodies and other State Departments

11. Where can I access official documents or notifications?

You can visit the official website:

https://ospcboard.odisha.gov.in/

2. Environmental Acts and Rules

1. **Which major Acts that guide the functioning of SPCB, Odisha?**

   SPCB, Odisha implements the following key environmental laws:

   Water (Prevention and Control of Pollution) Act, 1974

   Air (Prevention and Control of Pollution) Act, 1981

   Environment (Protection) Act, 1986

2. **What is the purpose of the Water Act, 1974?**

   This Act aims to prevent and control water pollution and to maintain or restore the wholesomeness of water bodies.

3. **What does the Air Act, 1981 regulate?**

   The Air Act is designed to control and reduce air pollution by regulating emissions from industries and other sources.

4. **What is the Environment (Protection) Act, 1986?**

   It is an umbrella legislation that empowers SPCBs to implement rules related to waste management, hazardous substances, and overall environmental protection.

5. **What rules does SPCB, Odisha enforce under the Environment Protection Act, 1986?**

   SPCB, Odisha enforces various Rules, including:

   Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016

   Solid Waste Management Rules, 2016

   Plastic Waste Management Rules, 2016

   Biomedical Waste Management Rules, 2016

   E-Waste (Management) Rules, 2016

   Construction and Demolition Waste Management Rules, 2016

   Batteries Waste Management Rules, 2022

   Fly Ash Notification (under EP Act)

6. **Are there rules related to noise pollution?**

   Yes. The State Government has declared the District Administration to enforce the Noise Pollution (Regulation and Control) Rules, 2000 under the Environment (Protection) Act, 1986. The Police personnel are authorized to maintain ambient air quality standards with respect to noise.

7. Does the Board regulate industrial siting or project approvals?

Yes. It is done through:

Conditions under Consent to Establish (CTE) and Consent to Operate (CTO)

Environmental Impact Assessment (EIA) Notification, 2006 and its amendments

8. What legal powers does SPCB, Odisha have under these Acts?

SPCB, Odisha has power for:

Consent Administration

Order closure or regulation of polluting activities

Monitor compliance and inspect facilities

9. What are the penal provisions for non-compliance?

Non-complince can lead to:

Penalty to be imposed by the Adjudicating Offices

Imprisonment with fine and/or fine

Closure of operations

Seizure of equipment or property

10. What is remedy available to any person aggrieved with the order of the Board?

As per the provision under section 28 of the Water (Prevention and Control of Pollution) Act, 1974, and section 31 of the Air (Prevention and Control of Pollution) Act, 1981, Govt. of Odisha in Forest, Environment and Climate Change Department have constituted Appellate Authorities to hear appeals preferred against the order made by State Pollution Control Board.

The court and office of the Appellate Authorities are functioning at Toshali Bhawan, A-2 Block, 2nd Floor, Satya Nagar, Bhubaneswar, Odisha- 751007.

11. Where can I find official copies of these Acts and Rules?

You can download them from the official SPCB, Odisha website:
https://ospcboard.odisha.gov.in
cpcb@nic.in
moef@gov.in

3. Activities of State Pollution Control Board, Odisha

1. What are the primary functions of SPCB, Odisha?

The main activities include:

Monitoring and Controlling Pollution (Air, Water, & Noise)
Issuing Consents to Establish and Operate Industries, ensuring they comply with pollution control standards.
Enforcing environmental laws
Advising the Government on pollution control matters
Conducting research to understand pollution better and explore new technologies for mitigation.
Issuing notices and take legal action against polluters, according to their powers and the Environment (Protection) Act, 1986
Managing different types of waste, including biomedical waste, hazardous waste, and municipal solid waste
Collaborating with the Central Pollution Control Board (CPCB) to organize training programs for pollution control professionals and create public awareness.

2. Does SPCB, Odisha monitor any type of pollution?

Yes, SPCB, Odisha conducts:

Ambient Air Quality monitoring

Surface and groundwater quality assessment

Industrial emissions and effluent monitoring

Online Continuous Emission Monitoring System (OCEMS) at major industries

3. What are the enforcement actions of SPCB, Odisha?

The enforcement actions of SPCB include;

Issuing Show Cause Notices / Directions / Closure Directions to polluting units
Imposing of penalties or initiating prosecution under environmental laws

4. What role does SPCB, Odisha plays in waste management?

The Board regulates:

Hazardous waste

Biomedical waste

Municipal Solid Waste

E-waste

Plastic waste

Non- Hazardous Solid Waste

It issues guidelines for proper handling, treatment, and disposal of various wastes as per

their respective rules.

5. What types of industries require authorization from SPCB, Odisha?

All industries with potential environmental impact, including:

Industries, Mines, Urban Local Bodies, Healthcare Units, Hotels and Infrastructure Projects that discharge sewage or trade effluent into the environment or emit air pollution are required to obtain consent from the State Pollution Control Board (SPCB).

Manufacturing units

Mining projects

Healthcare facilities

Hotels

Infrastructure projects must obtain appropriate environmental consents and authorizations.

6. Does the Board conduct inspections?

Yes. SPCB officials conduct:

Routine inspections

Surprise checks

Compliance verifications

SPCBs have a mandate to enforce environmental laws and regulations. These include inspections related to solid waste management, hazardous waste management, and other environmental regulations. SPCB also conducts inspections of industrial and other activities to ensure they are complying with established standards. These inspections can be regular or in response to complaints or suspected violations;

This ensures adherence to environmental norms.

7. What type of awareness activities does the Board undertake?

SPCB, Odisha organizes:

Celebration of various days such as World Environment Day, Ozone Day, Earth Day, Pollution Prevention Day, etc.

Workshops and training programs

Support in eco-club schools

Public awareness campaigns on pollution control and sustainable practices

Educational campaigns on specific issues such as air, water, and noise pollution, and waste management

Public awareness on the impact of pollution and community roles in environmental protection

Waste management education: promoting segregation, recycling, and proper disposal

Monitoring and enforcement: ensuring compliance with environmental standards

Training programs: conducted in collaboration with other institutions

Field visits and seminars for public and stakeholder education

Cleanliness campaigns

Environmental awareness fairs and exhibitions

8. Does SPCB, Odisha undertake research and development?

Yes. The Board:

Conducts studies on local environmental issues

Collaborates with academic and research institutions

Publishes technical reports and pollution control manuals

9. How does the Board support environmental planning?

It is done by:

Advising the state on policy matters

Participating in Environmental Impact Assessments (EIAs)

Recommending conditions for environmentally sensitive projects

Implementing and Enforcing Environmental Regulations

Providing technical advice and support to other Government Departments and stakeholders on environmental matters.

10. Are real-time data on pollution available to the public?

Yes. Pollution data from Continuous Emission Monitoring Systems (CEMS) and ambient monitoring stations are often published online in the following link: https://www.odishapcb.nic.in

11. Can the public file complaints with SPCB, Odisha?

Yes. Citizens can:

File pollution-related complaints

Report environmental violations

Use grievance mechanisms through the website or regional offices

4. Categorization of Industry (Red, Orange, Green, Blue & White)

1. Why does CPCB categorize industries?

To assess and manage the environmental impact of industries based on their Pollution Index (PI). The aim is to:

- Streamline environmental regulation
- Apply proportional compliance norms
- Promote cleaner practices

2. What is the Pollution Index (PI)?

It is a score calculated based on:

- Air emissions
- Water effluents
- Hazardous waste
- Resource consumption

It quantifies how much environmental harm an industry may cause.

3. How is pollution index used to categorize industries and how many industrial sectors are there in each category?

Category	Pollution Index (PI)	Number of Industrial sectors
Red	PI $\geq$ 80	125
Orange	55 $\leq$ PI < 80	137
Green	25 $\leq$ PI < 55	94
White	PI < 25	54
Blue	For essential environmental services facilities related to environmental pollution arising from domestic / household activities. *(e.g., Municipal solid waste management facility, sewerage treatment plant, CD waste processing unit)*	09

4. **What are typical examples under each category?**

Category	Example Industries
Red	Steel, Aluminium, Cement, Fertilizer, Thermal Power, Sugar, Distillery etc.
Orange	Building projects, Airports, Stone Crushers, Pharmaceutical formulation, Parboiled Rice mills etc.
Green	Chilling unit, Briquette Assembling units, Ice cream plants, RMC plants, Raw Rice mills etc.
White	Solar equipment, Handloom weaving, Air-cooler assembling, Chalk making etc.
Blue	Municipal Solid waste Management Facility, Sewage Treatment Plant

5. **Which industries don't need Consent to Operate?**

   Industries in the White category are exempted from Consent to Establish (CTE) and Consent to Operate (CTO). Only intimation to SPCB is needed.

6. **Where can one access details of categorization of industries?**

   One can access the details of categorization from CPCB website with the following link; https://cpcb.nic.in/industry-classification

7. **What will happen if one considers their industry in a different category than it's real category?**

   After scrutinizing the application and finding the error, SPCB will ask the industry to rectify the mistake and to pay differential fee for CTO.

8. **Do these categories impact license or clearance timelines?**

   Yes. Lower-polluting categories (Green/White) usually get faster approvals, while Red / Orange category industries under go stricter scrutiny and longer timelines.

9. **Who is empowered to declare different categories of Industries?**

   Central Pollution Control Board, declares and publishes the list of different categories of Industries from time to time. However, State Board can recommend the additional categories.

5. Online Consent Management and Monitoring System (OCMMS)

1. **How to register/open a new account on OCMMS portal?**

   The applicant needs to register in (www.odocmms.nic.in) portal entering industry/Mines/ HCUs/ ULBs detail and occupier detail to create an account. This usually involves providing information about industry location, categorization, investment, and contact details.

2. **Why am I not able to login?**

   You have to select user type, as industrial user. The applicant must enter correct login credentials and CAPTCHA code.

3. **How to recover a forgotten password?**

   To recover a forgotten password on odocmms.nic.in, use the "Hint Question" feature, which you should have set during initial registration. This will guide you through the password reset process. In case you forget the hint answer, you need to contact the State Pollution Control Board, Odisha for assistance.

4. **How to change account password?**

   To change your password on odocmms.nic.in, log in using your existing user ID and password. Once logged in, go to the change your password section to enter your old password and set a new one.

5. **How to check whether my application is submitted or not?**

   To verify if your application is submitted on odocmms.nic.in, log in to the Online Consent Management & Monitoring System (OCMMS) and Check "In Progress Applications": This section will show applications that are still being worked on.

   Check "Completed Applications": This section will display applications that have been fully submitted and are awaiting processing. If your application is here, it's likely submitted.

6. **How to fill the application form?**

   To fill the application form on www.odocmms.nic.in, the user has to log in with your existing credentials. Then, navigate to the "Apply for Consent" section and follow the prompts to complete the form, including uploading required documents and making online payment.

7. **What are the mandatory documents required for submission?**

   To submit applications through odocmms.nic.in, mandatory documents depend on the specific application type, but generally include PROJECT REPORT, KML FILE, CTO COMPLIANCE, Audited balance sheet, etc.

8. How to check status of application?

To check the status of your application on odocmms.nic.in, you need to log in to the website using your user ID and password. Once logged in, you can view your application status on the home page, which is divided into two tabs: "In progress Application" and "Completed Application"

9. How much time is required to obtain consent?

The time required to obtain consent through odocmms.nic.in depends on the specific type of consent (e.g., Consent to Establish, Consent to Operate) and the completeness of the application.

If application is complete it is disposed off maximum within the ORTPS timeline

10. How to submit my consent payment/fee to Board?

Register or log in to odocmms.nic.in, access your application, go to payment section, and complete the payment process online through digital payment/net banking methods.

11. How to verify registration documents from SPCB?

You can usually find a section or tab within your account where you can view and verify the status of your submitted documents. This may include application forms, scanned documents, or other relevant information.

12. How to know additional information required by Board with respect to my application?

If additional information or document is required, SPCB, Officials will raised a clarification. Go to 'Completed Application' and clicks on 'Clarification' to view a respond.

13. How to submit my additional information?

To submit additional information on www.odocmms.nic.in, first access the OCMMS website and log in using your existing ID and password. Once logged in, navigate to the specific application or section where the additional information needs to be added. Depending on the type of information, you may need to upload documents, fill out specific forms, or provide details online. Finally, save the changes and submit the application.

14. How to lodge complaint related to web portal?

To lodge a complaint related to the Odisha Online Consent Management & Monitoring System (odocmms.nic.in), you can access the complaint portal on the Odisha State Pollution Control Board (SPCB) website or directly through the OCMMS website or send e-mail to paribesh1@ospcboard.org or ocmms@ospcboard.org.

15. How to Change my Mail-Id & mobile Number?

To change your email ID or mobile number in odocmms.nic.in, you'll need to log in to your account, navigate to your application, and make the necessary edits. Once logged in, you can locate your application, click the "edit" button, and then modify the relevant details. After making the changes, ensure you save them.

16. While filling the application, what information must be entered under 'Company Registration'?

To register an industry/mine on odocmms.nic.in, you'll need to fill out details in the Industry/Mining Details and Occupier Details sections. This includes information about the industry/mine itself, as well as details about the occupier (owner). It's crucial to fill all mandatory fields, especially the email address, which is used for communication. A "Hint Question" in the occupier details is also important for password recovery.

6. Consent to Establish

1. **What is consent to establish?**

   Consent to Establish (CTE) is a permission granted by the State Pollution Control Board (SPCB), Odisha under Section 25 of Water (Prevention & Control of Pollution) Act, 1974 and Section 21 of Air (Prevention & Control of Pollution) Act, 1981, to establish or construct an industrial unit or project.

2. **Which authority categorizes industries, and how many industrial sectors are there in each category?**

   Central Pollution Control Board has categorized a total of 419 sectors under Red (125), Orange (137), Green (94) & Blue (9) and White (54) Category of units/ industries.

3. **Which categories of industries require CTE?**

   Red, Orange, Green and Blue category of industries require CTE.

4. **Which category of Industries is exempted from CTE?**

   White Category of industries are exempted from CTE.

5. **Who needs to obtain CTE?**

   Any person desiring to establish any industry, operation or process, or any treatment and disposal system or any industrial plant in an air pollution control area is required to obtain CTE.

6. **How the proponent can apply for CTE?**

   Applications must be submitted online uploading requisite documents through the OCMMS (Online Consent Management and Monitoring System) at: https://www.odocmms.nic.in

7. **What documents are required to apply for CTE?**

   Documents include:

   a) Consent to establish application in prescribed format.

   b) Adequate fees prescribed for obtaining consent to establish.

   c) Land schedule of the site with supporting documents such as Registration / lease / sale deed etc.

   d) Detail project report (DPR)

   e) Vicinity map indicating distance from the following:

   f) Plant layout map of appropriate scale superimposed with revenue map

   g) EIA/EMP report prepared as per TOR (if required environmental clearance as per EIA notification, 2006 of MoEF, Govt. of India).

h) Copy of approved mining plan from IBM/ Ministry of Coal as the case may be (for mining project only).

i) Copy of mining lease (for mining project only).

j) Copy of environmental clearance (if applicable) for only the project located within critically polluted area.

8. Is there a fee for applying for CTE?

Yes, an application fee is calculated based on the project category and investment in case of industries and in case of mines based on production capacity of the mineral. Similarly different fee structure has been prescribed for Urban local bodies and Health care units.

9. Is there any notification for fee structure?

Yes. This notification can be downloaded from www.ospcboard.org.

10. How this CTE fees is to be deposited?

CTE fees can be deposited during online application at www.odocmms.nic.in.

11. How the CTE application is processed?

The CTE application is processed and disposed of both at Head Office and Regional Office of the Board as per delegation of power. The CTE applications are automatically routed to both Head Office and Regional Offices of the Board for disposal.

12. Which category of industries are granted CTE at Head Office?

The list includes:

17 categories of highly polluting industries having investment of Rs. 50 Crore of more

Coal, Bauxite Iron Ore, Manganese, Limestone, Dolomite & Chromite Mines

All sponge iron plants

Hazardous Waste recycling and re-processing unit including TSDF irrespective of any investment

Reclamation of low lying area / abandoned quarries with ash outside the plant premises for land measuring more than 10 Acres (Consent to Establish to be granted with the approval of Member Secretary and same to be taken to the Consent Committee for ratification on case to case basis as per Office Order no. 11047/IND-IV-PCP-FARC-120 dated 21.08.2017)

Sodium Dichromate Plants

Common Bio-Medical Waste Treatment and Disposal Facility (CBWTDF)

13. Which category of industries are granted CTE at Regional Office?

The list includes

Other than 17 category of polluting industries (Red and Orange) having investment upto Rs. 50 Crore

All Green Category industries

Mines other than Coal, Bauxite, Iron Ore, Manganese, Limestone, Dolomite & Chromite

Reclamation of low lying area / abandoned quarries with ash outside the plant premises for land measuring 10 Acres and less (As per Board Resolution no. 11047/IND-IV-PCP-FARC-120 dated 21.08.2017)

14. What is the timeline for processing CTE application?

As per Odisha Right to Public Service Act, 2012 for Consent to Establish, the following time limits are fixed for disposal of application:

Category	Days
Red	45 to 60
Orange	30 to 45
Green	30

15. Can a CTE be refused?

Yes. The Board may refuse the CTE application citing the reason to be recorded in writing.

16. Is CTE transferable?

Yes. If ownership or management changes, it may be transferred subject to submission of authentic legal documents.

17. Is there any validity period of CTE?

The Consent to establish order is valid for five years, which means the proponent shall commence construction of the project within a period of five years from the date of issue of the order. If the proponent fails to do substantial physical progress of the project within five years, then a renewal of this consent to establish shall be sought by the proponent.

18. What happens when the project proponent could not make substantial progress within validity period of CTE?

The proponent shall apply for revalidation of CTE order as per Guidelines for auto revalidation/modification of Consent to Establish order of SPCB, Odisha vide notification no. 10534/Ind-II-NOC-Misc.-68 dated 27.06.2016.

19. What happens after issue of CTE?

Once CTE is obtained, the applicant may start construction. However, Consent to Operate (CTO) must be obtained before commencing production or operations.

20. What happens when someone start construction without obtaining CTE from SPCB?

Levy on pollution charges are imposed which is 5 times of the CTE fees as per the guidelines of the SPCB. But utmost care is exercised to avoid such occurrence.

21. Whom to contact for support or queries?

You may contact: State Pollution Control Board, Odisha

Paribesh Bhawan, A/118, Nilakantha Nagar, Bhubaneswar – 751012

(www.ospcboard.org) (Email: paribesh1@ospcboard.org)

7. Environmental Clearance

1. What does "Prior Environment Clearance" mean as per EIA Notification, 2006?

Prior Environment Clearance (referred to as 'prior-EC')" means the clearance or consent of the Regulatory Authority on the recommendation of the Expert Appraisal Committee for the Category 'A', Category 'B1', and Category 'B2' projects that are required to be placed before the State Level Expert Appraisal Committee as specified in the Schedule to the EIA Notification, 2006 read with subsequent amendments made therein from time to time.

2. What is the difference between Category 'A' and Category 'B' projects as per EIA Notification, 2006 and amendment thereafter?

Category 'A' Projects: These are appraised at the Central Govt. level by the Expert Appraisal Committee (EAC) of the Ministry of Environment, Forest and Climate Change (MoEF&CC).

Category 'B' Projects: These are appraised at the state level by State level Expert Appraisal Committee (SEAC) and State Environment Impact Assessment Authority (SEIAA). Category 'B' projects are further divided into:

B1: Projects requiring EIA studies.

B2: Projects that do not require EIA studies

3. What is the State Level Expert Appraisal Committee (SEAC) of Odisha?

The SEAC Odisha is a statutory body constituted by the Central Government in consultation with the State Government under the Environment (Protection) Act, 1986. It assists the State Level Environment Impact Assessment Authority (SEIAA) in screening, scoping, and appraising Category 'B' projects and activities that require prior environmental clearance within the state.

4. What is the tenure of SEAC members?

Members of SEAC are appointed for a term of three years. The committee is reconstituted every three years by the Central Government in consultation with the State Government.

5. How can a project proponent apply for Environmental Clearance?

Project proponents must submit their applications online through the PARIVESH Portal 2.0. The application should include:

Form 1 (and Form 1A for construction projects)

Pre-feasibility report and/or conceptual plan (in case of building & Construction projects)

Draft EIA report (if applicable)

Mining Plan for mining projects.

Copy of application for Stage-1 Forest Clearance (if applicable)

Any other relevant documents

6. What are the stages involved in the appraisal process for obtaining Environmental Clearance?

The appraisal process involves:

Screening: Determining whether the project requires an EIA study. (Mostly for category B projects)

Scoping: Defining the ToR for the EIA study.

Public Consultation: Organizing public hearings to gather feedback from affected communities.

Appraisal: Evaluating the EIA report and other documents to make recommendations for grant of EC.

7. What happens if a project begins without EC?

It is treated as a violation under the Environment (Protection) Act, 1986.

7.1 Environmental Clearance for Major Minerals Mines:

1. **Who grants EC for major mineral mining projects?**

   Environmental Clearance is granted by State Environment Impact Assessment Authority (SEIAA) for less than or equal to 250 ha mining lease area in respect of major mineral mining lease other than coal and in respect of coal mining lease area having less than or equal to 500 ha.

2. **What are the documents required for Category 'B1' (Major Minerals Projects) for ToR?**

   i) Filled in Form-I (online)

   ii) Approved Mining Plan

   iii) Pre-feasibility Report

   iv) District Survey Report (DSR)

   v) Lease document and/or any other document for proof of Lessee/ Ownership.

   vi) DLC certificate from concerned DFO /Tahasildar

   vii) Copy of application for Forest Clearance (if forest land involved)

   viii) Money Receipt of scrutiny fees

   ix) KML file

   x) Executive Summary (Minimum 2 pages in word format)

3. **What are documents to be submitted for Category 'B1' Major Minerals Projects for Final Appraisal for EC?**

   i) Final EIA/EMP Report

   ii) Approved mining plan

   iii) KML file

   iv) Status of Forest Clearance (if applicable)

   v) Executive Summary (Minimum 2 pages in word format)

7.2 Environmental Clearance for Minor Mineral Mining Projects:

A. GENERAL

1. Is Environmental Clearance (EC) required for mining minor minerals?

Yes, as per the EIA Notification, 2006 (amended from time to time), all mining activities irrespective of lease area including mining of minor minerals require prior Environmental Clearance.

2. What are Minor Minerals?

Minor minerals include materials like building stones, gravel, ordinary clay, ordinary sand, limestone, kankar and other minerals notified as "minor" by the Central Government under Section 3 (e) of the MMDR Act, 1957.

3. How mining of Minor Minerals is regulated in the state of Odisha?

In Odisha, the mining of minor minerals is regulated through the Odisha Minor Mineral Concession (OMMC) Rules, 2004, and subsequent amendments made in 2016.

4. Who grants EC for minor mineral mining projects?

Environmental Clearance is granted by State Environment Impact Assessment Authority (SEIAA) for all minor mineral projects, irrespective of lease area, as Category 'B' projects.

5. What is Cluster Situation?

A cluster is formed when the distance between the peripheries of one lease is less than 500 meters from the periphery of an other lease in a homogeneous mineral area.

6. How are Minor Minerals (including sand mines) categorized?

Individual mine lease having lease area upto 5 ha comes under 'B2' category (does not require detailed Environment Impact Assessment (EIA) study and public hearing)

Individual mine having lease area more than 5 ha comes under 'B1' category (requires detailed EIA study and public hearing)

For mining having 'Cluster area' of mining lease up to 5 ha comes under category 'B2' (does not require detailed EIA study and public hearing).

For cluster area of mining lease having area greater than 5 ha comes under category 'B1' (requires detailed EIA study and public hearing).

7. Why is EIA/EMP required in a Cluster?

Most minor minerals mining occurs in clusters. An Environment Impact Assessment (EIA) or Environment Management Plan (EMP) is required for the entire cluster to capture externalities like carrying capacity, transportation impacts, replenishment and

recharge issues, geo-hydrological impacts. The Environment Impact Assessment or Environment Management Plan shall be prepared by the State or State nominated Agency or group of project proponents in the Cluster or the project proponent in the cluster.

8. Whether General Condition is applicable for Minor Mineral?

No, General Condition is not applicable for mining of minor minerals.

9. What is the District Survey Report (DSR) and why is it important?

The DSR is a mandatory scientific document prepared by the district administration that outlines mineral resources, environmental sensitivity, mining zones, and sustainability. It is mandatory for granting EC for minor minerals and prevents over-exploitation.

10. Who gives District Level Committee (DLC) certificate?

The DLC certificate is issued by the concerned Tahasildar and DFO.

11. Are sand mining and river bed mining considered under minor minerals?

Yes, sand and river bed materials classified as minor minerals.

12. What are the environmental safeguards for minor mineral mining?

Reclamation of mined-out areas, Controlled blasting and dust suppression, Groundwater protection, Biodiversity conservation, Regular environmental monitoring and compliance reporting.

13. Are individual or lessees responsible for EC compliance?

Yes, the project proponent (lessee/operator) is fully responsible for obtaining and complying with the EC conditions.

14. What are the documents required for Category 'B1' Minor Minerals Projects for ToR?

i) Filled in Form-I (online)

ii) Approved Mining Plan

iii) Pre-feasibility Report

iv) District Survey Report (DSR)

v) Lease document and/or any other document for proof of Lessee/ Ownership.

vi) DLC certificate from concerned DFO /Tahasildar

vii) Copy of application for Forest Clearance (if forest land involved)

viii) Money Receipt of scrutiny fees

ix) KML file

x) Executive Summary (Minimum 2 pages in word format)

15. What are documents to be submitted for Category 'B1' Minor Minerals Projects for Final Appraisal for EC

i) Final EIA/EMP Report

ii) Approved mining plan

iii) KML file

iv) Status of Forest Clearance (if applicable)

v) Executive Summary (Minimum 2 pages in word format)

16. What are certain cases where prior Environmental Clearance is exempted?

EC is not required in following cases:

1. Extraction of ordinary clay or sand, manually, by the traditional Potter.
2. Extraction of ordinary clay or sand, manually, by earthen tile makers.
3. Removal of flood deposited sand on agricultural field by farmers.
4. Customary extraction of sand and ordinary earth from sources situated in Gram Panchayat for personal use or community work in village.
5. Community works like de-silting of village ponds or tanks, construction of village roads, ponds, bunds undertaken in Mahatama Gandhi National Rural Employment and Guarantee Schemes, other Government sponsored schemes, and community efforts.
6. Dredging and de-silting of dams, reservoirs, weirs, barrages, river, and canals for the purpose of their maintenance, upkeep and disaster management.
7. Traditional occupational work of sand by Vanjara and Oads in Gujarat vide notification number GU/90(16)/MCR-2189(68)/5-CHH, dated the 14th February, 1990 of the Government of Gujarat.
8. Digging of well for irrigation or drinking water.
9. Digging of foundation for buildings not requiring prior environmental clearance.
10. Excavation of ordinary earth or clay for plugging of any breach caused in canal, nala, drain, water body, etc., to deal with any disaster or flood like situation upon orders of District Collector or District Magistrate.
11. Activities declared by State Government under legislations or rules as non-mining activity with concurrence of the Ministry of Environment, Forest and Climate Change, Government of India.

B. SAND MINING

1. Which departments are responsible for sand mining in Odisha?

As of November 2022, the Steel & Mines Department, Govt. of Odisha regulates minor minerals including river sand mining in Odisha.

2. What environmental clearances are required before starting a sand quarry operation?

Lessees must obtain Environmental Clearance (EC) from SEIAA.

Consent to Establish (CTE) and Consent to Operate (CTO) must be taken from the State Pollution Control Board.

3. What is the validity of Environmental Clearance for Sand Mining Projects?

EC remain valid for the lease period. However, the project proponent requires to conduct the annual rate of replenishment study (ARRS) by ORSAC empaneled agencies in subsequent year and to submit SEIAA, Odisha for EC quantity revision.

4. What methods are adopted for sand extraction?

Manual methods are preferred, but semi-mechanized or mechanized methods may be permitted based on site conditions and EC approval.

5. Why Sand Replenishment Study is carried out?

To ensure balance between deposition and extraction and minimize adverse environmental impact arising out of excessive sand mining in a given stretch of river.

6. When Sand Replenishment Study is carried out?

The sand replenishment study is carried out twice in a year pre-monsoon usually between April-June and post-monsoon usually after October.

7. How Sand Replenishment Study is carried out?

Sand Replenishment Study is carried out using drone besed (digital) method and conventional Volumetric method.

8. Who conduct the Sand Replenishment Study?

Orissa Remote Sensing Application Centre (ORSAC) and NABET/QCI accredited consultants are engaged to carry out the study by following the guidelines issued of MoEF&CC, Govt. of India.

9. How Sand Replenishment Study is carried out in Drone Method?

Initially, virtually ground control points (GCP) at a grid interval of 10 m x 10 m is established around sand leased area. The horizontal and vertical controls are transferred to those virtual GCPs for the creation of precise digital elevation model from the drone imaginary.

A close network of GCP is established at a grid interval of 500 m x 500 m around the study area and the platforms are constructed in the riverbank along with defining the offsets from the GCPs to the sand lease area from different directions clearly. The horizontal coordinate (latitude and longitude) is transferred from nearby Survey of India GCP using dual frequency DGPS following the post processing survey methodology and occupying the GCP during the DGPS survey for minimum 1 hr. at each GCP.

The vertical coordinates are transferred from nearby benchmark height of survey of India using digital leveling following the methodology of Survey of India. The GCP documentation, DGPS survey for the calculation of horizontal coordinates for the GCPs transferred from the national GCP grid established by survey of India and transfer of benchmark height (MSL) height to the ground control points are done.

10. How Sand Replenishment Study is carried out in Conventional Volumetric Method?

In the Conventional Volumetric Method, the quantity of sand is calculated multiplying the area of the grid (i.e.100m^2 for 10m x 10m grid) with the change in elevation at a grid point and number of grids with positive elevation in effective lease area. Effective lease area excludes the concave area, prohibited area and water-logged area in the mining lease.

11. What are the prohibited areas for sand mining?

Sand and gravel shall not be extracted up to a distance of 1 kilometre (1 km) from major bridges and highways on both sides, or five times of the span of a bridge/public civil structure (including water intake points) on up-stream side and ten times the span of such bridge on down-stream side, subjected to a minimum of 250 meters on the upstream side and 500 meters on the downstream side.

12. What is safe distance maintained from River embankment for sand mining?

No mining shall be permitted in an area up to a width of 100 meters from the active edge of embankments or distance prescribed by the Irrigation department.

C. STONE QUARRY

1. Is environmental clearance required for stone quarrying?

Yes. Mining of stone (minor minerals) regardless of lease area requires prior Environmental Clearance (EC) under the EIA Notification, 2006 and amendments made thereunder.

2. Which authority grants EC for stone quarries?

State Environment Impact Assessment Authority (SEIAA) grants EC for Stone Quarries.

3. What are typical environmental concerns of stone quarrying?

Dust and air pollution

Noise and vibration

Groundwater depletion

Habitat loss and deforestation

Land degradation and slope instability

4. What are the siting distance criteria for stone quarries?

As per the order of Hon'ble National Green Tribunal (NGT) in O.A. No. 304/2019 (in interim order dated 21.07.2020), quarrying shall not be carried out within 500m of structures, bridges, railway bridge, embankment, dams, weirs, ground water extraction points, water supply head works, extraction points for irrigation and any other cross drainage structures. No stone quarry involving blasting will be operated within 200m (minimum distance criteria) from Residential/public buildings, inhabited sites, other location etc.

5. What is the minimum distance from agriculture land in Odisha?

While no fixed limit is notified, protective bunds, sediment traps, and buffer zones of 50–100 meters are generally enforced to avoid runoff damage to crops.

6. What are the criteria for blasting in Odisha stone quarries?

Controlled blasting with delay detonators is mandatory.

No blasting within 500 meters of sensitive structures (schools, hospitals, temples).

Fly rock prevention mats, safety shelters, and blasting time notifications are compulsory.

Use of seismograph for vibration monitoring near habitations is required

7. Is blasting allowed at night in Odisha?

No. Blasting is strictly prohibited between 6 PM and 6 AM. Blasting schedules must be publicly displayed and informed to nearby villagers.

7.3 Environmental Clearance for Building Construction Project:

1. **Which building projects / township & area development project require EC as per the EIA Notification, 2006 and from which authority?**

Project Type	Authority
Built-up area = 20,000 m² and <1,50,000 m²	EC from SEIAA (Category B2)
Built-up area = 1,50,000 m²	EC from SEIAA (Category B1)
Township & area development project having area of >50 ha and or built-up area >1,50,000 m²	EC from SEIAA (Category B1)

2. **What is 'Built-up area'?**

   Built-up area includes all covered areas, including basement, service areas, balconies, and internal roads, as per the Urban and Regional Development Plans Formulation and Implementation (URDPFI) Guidelines and MoEF&CC clarification.

3. **Whether public hearing is required for building construction projects?**

   No, public hearing is not required for building & construction projects.

4. **Where to apply and what are the documents required for obtaining Environmental Clearance?**

   The applicant needs to register on the PARIVESH 2.0 portal https://parivesh.nic.in and submit following documents:

   i) Form 1, Form 1A,
   ii) Building layout,
   iii) Building Plan approval from the concerned authority,
   iv) Conceptual plan,
   v) Pre-feasibility report,
   vi) KML file,
   vii) Land Document and conversion of land (Gharabari or Industrial purposes),
   viii) Money Receipt of scrutiny fees,
   ix) Clearance from AirPort Authority of India,
   x) Traffic study vetted by reputed institute,
   xi) Structural stability report dully vetted by reputed institutes,
   xii) Permission for discharge of treated effluent and storm water from concerned authority,
   xiii) Fire safety recommendation,
   xiv) Copy of application fee
   xv) Water drawl permission from concerned authority.

7.4 Environmental Clearance for Country Liquor industries:

1. Country Liquor projects fall under which category of EIA Notification?

a. Country Liquor Projects (using Mahua or molasses) generating <100 KLD wastewater comes under small-scale B2 category and are exempt from detailed EIA but require EC.

b. County Liquor projects (using Mahua or molasses) generating >100 KLD of wastewater comes under small scale B1 category and required detailed EIA.

N.B. As per the proceedings of meeting of SEAC held on dtd. 09.08.2017 regarding policy decision on country liquor proposals.

2. What documents are required for EC application for a Country Liquor unit?

i) Filled in Checklist,

ii) Form – I dully filled in,

iii) Prefeasibility Report,

iv) Process Flow Chart,

v) Land Document,

vi) Money Receipt,

vii) KML File,

viii) Copy of Excise License from Competent Authority,

ix) Copy of DIC Certificate (if registered)

x) Permission from CGWA for drawl of groundwater / copy of application.

xi) Copy of application for stage-I forest clearance (if applicable).

8. No Increase in Pollution Load (NIPL)

1. Is there any provision for obtaining Verification on No Increase in Pollution Load (NIPL) Certificate?

The MoEF&CC, Govt. of India has issued amended EIA Notification on 23.11.2016 and subsequently amended on dtd. 16.01.2020 and on dtd. 02.03.2021 for obtaining NIPL Certificate from the SPCB, Odisha.

2. Who can apply for verification of NIPL Certificate?

Any industry increase in production capacity in respect of processing or production or manufacturing sectors (listed against item numbers 2,3, 4 and 5 in the Schedule to this notification) with or without any change in (i) raw material-mix or (ii) product-mix or (ii) quantities within products or (ii) number of products including new products falling in the same category upto 50%or (iv) configuration of the plant or process or operations in existing area or in areas contiguous to the existing area (for which prior Environmental Clearance has been granted) shall be exempt from the requirement of Prior Environmental Clearance provided that there is no increase in pollution load (derived on the basis of such Prior Environmental Clearance).

3. How to apply for obtaining Verification on NIPL Certificate?

The industry shall apply online to the State Pollution Control Board along with prescribed format of MoEF&CC, Govt. of India along with certificate obtained from Environmental Auditors, last Consent to Operate Certificate from the Board and online system generated acknowledgment of uploading of intimation and NIPL Certificate on "PARIVESH Portal" along with a fee of Rs. 20,000/-.

4. What is the mode of payment for NIPL Certificate?

The payment shall be made through online on OCMMS portal of the Board.

5. Who are the Environmental Auditors?

The MoEF&CC, Govt. of India notified on dtd. 23.8.2021 that the Environmental Auditors as mentioned in the Notification shall include all QCI-NABET accredited EIA consultants for the respective sectors and Category (A or B), provided the same consultants has not rendered consultancy service for proposed expansion of the said project. Further, the consultant accredited for Category 'B' projects shall not audit Category 'A' project. It is also clarified that 'Reputed Institutions' as mentioned in the Notification shall include CSIR laboratories specializing in the relevant sectors for the purpose of providing "NIPL Certificate".

The State Board also issued an Office Memorandum vide letter No. 10329, dtd. 02.8.2017 for empanelment of Environmental Auditor of reputed institutes like IIT, Bhubaneswar (Multi-Disciplinary), NIT, Rourkela (Multi-Disciplinary), VSSUT, Burla, Sambalpur (Air & Water) and IMMT, Bhubaneswar (Minerals & Materials)

6. Is there any committee formulated to examine the verification of NIPL Certificate?

A Technical Committee has been constituted in the Board comprising of officers from State Pollution Control Boards, Central Pollution Control Board and 4 external experts drawn from the academic / research institutes nominated by State Govt.

7. What are the Terms of Reference of Verification of NIPL Certificate?

The applicant along with environmental auditors shall make presentation before the Technical Committee and the Technical Committee shall examine the details received from the applicant and the environmental auditors. A proceeding is prepared/drafted and approved by the Chairman of Board. After approval of the proceeding, the verification on NIPL Certificate is issued to the applicant.

9. Public Hearing

1. Why it is required to conduct a Public Hearing?

Public Hearing/Public Consultation is a mandatory step in the environmental clearance process for category 'A' and 'B1' project as per EIA Notification, 2006. (the activity termed as Public hearing as per EIA Notification, 1994 and wherein Notification, 2006 it is termed as Public Consultation).

2. What is a Public Hearing?

Public hearing refers to the process by which the concerns of local affected persons and others who have plausible stake in the environmental impacts of the project are ascertained with a view to incorporating all the material concerns in the project or activity design as appropriate.

3. What is the Role of SPCB, Odisha in Public Hearing?

The role of the Board is limited only to facilitate conduct of public hearing under the supervision of the District Collector or / his representative and forward the proceedings to the concerned regulatory authority (i.e. MoEF&CC for Category-A projects and SEIAA, Odisha for Category-B1 projects) for consideration of Environmental Clearance.

4. What is the Procedure to apply Public Hearing to SPCB?

The applicant shall make a request through a simple letter to Member Secretary, SPCB, Odisha with a fee of Rs. 1,50,000/- for category 'B' projects and fee of Rs. 2,00,000/- for category 'A' projects.

5. What is the mode of payment of Public Hearing Fees?

Payments must be made through online gateway:

https://ospcboard.org/whats_new/link-for-online-payment-of-public-hearing-fee/

6. What documents are to be submitted by the Proponent to SPCB to conduct Public Hearing?

Following documents need to be submitted by the proponent to SPCB:

i) Money receipt towards Public hearing Fees.
ii) Draft EIA reports (hard copies) – 10 copies.
iii) Executive summaries in Odia and English (hard copies) – 10 copies each.
iv) Draft EIA reports, Executive Summaries in Odia and English (soft copies in pdf format in combination) – 10 sets (in CD/USB drive).
v) Copy of the Terms of Reference (ToR).

7. To whom the copies of draft EIA Report with Executive Summary shall be submitted additionally by the Proponent?

i) District Magistrate / District Collector / Deputy Commissioners
ii) Zilla Parishad or Municipal Corporation or Panchayats Union

iii) District Industries Office
iv) Urban Local Bodies (ULBs) / PRIs concerned / Development Authorities
v) Concerned Regional Office of the Ministry of Environment and Forests

8. What is the Role of Authorities who received the draft EIA Report?

The role of authorities except for Regional Office, MoEF&CC, other are responsible for widely publicizing the draft EIA Report within their respective jurisdiction and inviting public comments.

9. What are the documents available in the Board's website related to Public Hearing?

Only the summary of the draft EIA Report in English and Odia are available in Board's website.

10. What is the Minimum Period for Public Notice?

After fixing of date, a minimum notice period of 30 days to be provided and published in one major National daily / Regional vernacular daily.

11. If the Public Hearing is cancelled, what time period should be given in public notice?

In case of cancellation of public hearing, a period of 15 days shall be given in public notice.

12. Who Supervise and Preside over the Public Hearing?

The District Magistrate/ District Collector/ Deputy Commissioner or his/her representative not below the rank of an Additional District Magistrate shall supervise and preside over the entire public hearing process assisted by a representative of SPC Board".

In case the project or activity is confined to the territorial jurisdiction of one sub-division, the District Magistrate/ District Collector/ Deputy Commissioner may alternatively authorize any officer not below the rank of Sub- Divisional Magistrate to supervise and preside over the entire public hearing process assisted by a representative of SPC Board.

13. Who can participate in the Public Hearing?

All the persons including bonafide residents, environmental groups and others located at the proposed site / sites of displacement / sites likely to be affected, any person who is likely to be affected by the grant of Environmental Clearance, any person who owns his control over the project with respect to which an application has been submitted for environmental clearance, any association of persons whether incorporated or likely to be affected by the project and / or functioning in the field of environment and any local authority within any part of whose local limits is within the neighborhood, wherein the project is proposed to be located.

14. What are the steps to be followed during Public Hearing?

Representative of applicant to initiate with a presentation on the project and summary EIA report.

Every person is given opportunity to seek information/clarification about the project from the applicant.

Videography of entire proceedings arranged by SPCB.

Attendance of all those who are present at the venue.

Any written representation received during public hearing.

Addressing the major issues raised by public during Public Hearing and comments of applicant are recorded in local language and in English.

15. If any person fails to attend the Public Hearing, can he submit his views or comments in any other platform?

Yes, they can submit their views / comments in writing either through hard copies or through E-mail to SPCB, Odisha.

16. Who prepare the Proceeding of Public Hearing?

The concerned Regional Office prepares the proceeding.

17. How to publicize the Proceeding of the Public Hearing?

Proceeding to be conspicuously displayed at offices of concerned Panchayatas, Zilla Parishads, District Magistrate and Board's website for general information and comments if any on the proceeding and the time period for submission of views is 30 days.

18. What is the time period for completion of Public Hearing?

The public hearing shall be completed within 45 days from the date of receipt of request letter and proceeding shall be forwarded to the concerned regulatory authorities SEIAA, Odisha / MoEF&CC, Govt. of India as the case may be within 8 days.

10. Consent to Operate (CTO) - Industries

1. **What is Consent to Operate (CTO)?**

   Consent to Operate (CTO) is a statutory permission from the State Pollution Control Board (SPCB) required by industries / mines / facilities before commencing operations that may generate Water & Air pollution under the Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981.

2. **Who needs to apply for CTO?**
   All industries, especially those falling under Red, Orange or Green categories and likely to discharge sewage or trade effluent or emit air pollutants, must obtain CTO before starting operations. This includes manufacturing units, processing industries, hotels, hospitals, and other establishments.

3. **When should one apply for CTO?**

   One must apply for CTO after obtaining Consent to Establish (CTE) / Environmental Clearance (EC) as applicable, and at-least 120 days before starting actual operations.

4. **Where does one apply for CTO?**

   Application is to be made online through the Online Consent Management & Monitoring System (OCMMS) portal, available at http://odocmms.nic.in/OCMMS and fill up the application forms step by step.

5. **What documents are required to apply for first-time CTO?**

   Duly filled online CTO Application Form-II

   Required CTO fees (Based on Project Cost / CA certificate on investment of Land/ Building/ Plant machineries & Other installation without depreciation excluding working capital)

   Project Report

   Copy of Environmental Clearance (EC) if applicable

   Copy of Consent to Establish (CTE) if applicable

   Point wise compliance to EC and CTE conditions

   Details of Hazardous Waste Generation & Disposal practices

   Layout/site plan of the unit with pollution control system marked

   Details of Air Pollution Control Devices installed (e.g., ESP/ Bag filters/ Chimneys etc.)

   Details of Effluent Treatment Plant (ETP) or Sewage Treatment Plant (STP)

   Water consumption and wastewater generation details

   Details of Online Monitoring System Installed (CEMS/ CAAQMS/ CEQMS/ HD IP surveillance Camera) if applicable.

   Copy of permission / NOC for drawal of Ground Water (from CGWA) / Surface

Water (from W.R. Dept., Govt. of Odisha).

DG set details (if any) including acoustic enclosure and stack

Copy of PAN & Aadhaar of authorized signatory

Board of Director's Resolution or Authorization letter for the signatory

Ownership/lease deed of land or factory premises

Note: Additional documents may be required based on the type and category of the industry.

6. How long does it take for grant of first time CTO (approximately)?

Green Category Industries: 30 days

Orange Category Industries: 60 days

Red Category Industries: 90 days

7. What is the procedure followed to grant CTO?

Scrutinization of the documents w.r.t. compliance to EC and CTE conditions.

Site inspection by concerned Regional Office

Review of Compliance with norms

Issuance of CTO if everything is in order

8. What is the maximum period for which CTO can be granted?

Red category: 5 years (max)

Orange category: 10 years (max)

Green category: 15 years (max)

11. Renewal of Consent to Operate (CTO)

1. **When should one apply for Renewal of CTO?**

   One should apply for renewal of CTO at-least 120 days prior to the expiry of the existing CTO.

2. **Is there any provision of additional CTO fee in case of late CTO application? If so, how much of late fee is applicable?**

   Yes

Sl. No.	Period of applying	One time additional fee as late fee
1)	Between 120-45 days of the validity	25% of the fee
2)	Between 45 days till the validity	50% of the fee
3)	After expiry of validity	100% the fee

3. **Can one continue operations if CTO is expired and it is not renewed?**

   Yes, if your application qualifies for deemed Consent. Otherwise, it is legally not permitted to operate, if your CTO has expired, even if your renewal application is under process.

4. **What documents are required for renewal of CTO?**

   Compliance status of existing CTO conditions.

   Required CTO fees (based on Audited balance sheet)

   Copy of Audited Balance sheet (Gross value of fixed assets i.e. Land/ Building/ Plant machineries & Other installation without depreciation excluding working capital)

   Any additional documents required by the SPCB

5. **Does one need to re-submit all documents submitted during first time CTO?**

   For renewal of CTO, only updated information or changes since the last Consent are required.

6. **Is inspection of any industry is necessary for renewal?**

   Yes

7. **How long does CTO renewal take?**

   Standard timelines (as per category):

   Green Category Industries: 30 days

   Orange Category Industries: 60 days

   Red Category Industries: 90 days

8. What happens if one misses the renewal deadline?

Fresh application is to be submitted with CTO fee and late fee. If application is not submitted beyond expiry date, it may attract legal action on closure notice.

Face Enforcement action or Closure Notice

9. What is deemed CTO?

If a CTO application is processed for more than 120 days from the date of it's complete application, without any query / clarification raised by SPCB, the CTO is deemed to be granted.

12. Fuel Policy (for Use of Pet Coke & Furnace Oil)

1. Why the State Fuel Policy is framed?

As furnace oil and Pet Coke used as fuel in the industries emitted SO_2 in the flue gas, and several cases has been filed in Hon'ble Supreme Court and Hon'ble National Green Tribunal to ban the use of Furnace Oil and Pet Coke, keeping in view the directions of Hon'ble Supreme Court of India and order of Hon'ble NGT emphasizing on switching over to alternative and cleaner fuels, the State Govt. has framed Fuel Policy for the State.

2. What is Fuel Policy of Odisha?

The Forest, Environment & CC, Govt. of Odisha has notified Fuel Policy for the State of Odisha on 12th April, 2021, and subsequently amended it on 16.09.2021, 12.04.2023 & 04.02.2025 for regulation and control use of Pet Coke, Furnace Oil and use of other fuels in the State of Odisha.

3. Which type of cleaner fuels allowed for use in the State of Odisha?

The following cleaner fuels are allowed for use in the State of Odisha:

i) Liquefied Petroleum Gas (LPG)

ii) Liquefied Natural Gas (LNG)

iii) Piped Natural Gas (PNG)

iv) High Speed Diesel (HSD)

v) Bio Gas

vi) Bio-Fuel (Bio-Ethanol etc.)

vii) Refuse Derived Fuel (RDF): To be used in Cement Kiln and Waste to Energy Plant or any other unit allowed by the Central Government/ State Government.

viii) Biomass as fuel (like Bagasse, Briquettes/ Pellets etc.)/ Agriculture refuse/ dung cake).

ix) Low Sulphur Heavy Stock (LSHS)

x) Light Diesel Oil (LDO)

xi) Coal/Lignite

xii) Firewood/wood charcoal

xiii) Naptha / Propane / Gasoline / Hydrogen / Methane

xiv) Low Sulphur Heavy Stock (LSHS) premium (1.5% Sulphur maximum)

4. Which industries can use Pet Coke as Feed Stock?

In the industry / process where SO_2 gets absorbed such as Cement, Lime / Dolo Kiln, Calcined Pet Coke, Aluminium Smelter, Gasification, Calcium Carbide and Graphite Electrode industries can use pet coke as feed stock.

5. What is the Percentage of Sulphur content in raw Pet Coke used in Calcined Pet Coke (CPC) units?

The Sulphur content in the feed stock to CPC unit shall be maintained at 3.5% or less by blending of Pet Coke of different Sulphur content, in appropriate proportion so that more than 90% recovery of SO_2 emission will be achieved with appropriate Air Pollution Control measures.

6. In which case Pet Coke is allowed to be used in Integrated Steel Plant?

Use of pet coke shall be limited to 10% of its feed stock with Sulphur content not exceeding 3% can be used as raw material for blending with coking coal in recovery type coke ovens equipped with desulphurization plant.

7. Whether the unit has to install Online Monitoring System or not?

Yes, the industries using Pet Coke have to install online monitoring system for measurement of PM and SO_2 and connected to the RT-DAS server of the Board.

8. Whether Pet Coke is allowed for grinding, sizing and briquetting or not?

Yes, for grinding, sizing and briquetting, use of pet coke is allowed and they shall supply the raw pet coke to industries covered under Fuel Policy.

9. Whether any other industries allowed to use Pet Coke as feed stock?

Use of Pet coke is allowed as feed stock or in manufacturing process where Sulphur will be absorbed in the process and have to obtain permission from SPCB on case to case basis.

10. Whether new industries are allowed to use Furnace Oil as fuel in the State of Odisha?

No new industries are allowed to use Furnace Oil as fuel in the State of Odisha since the date of Notification of Fuel Policy.

11. What Pollution Control measures to be adopted for use of Furnace Oil in the existing units?

Industries using Furnace Oil shall install scrubbing system for more than 90%of recovery of SO_2 emission and provide stack height as per the following formula within 06 month.

$H = 14 (Q)^{0.3}$

Where, H = Stack height and Q = the emission rate of SO_2 in Kg/Hr

12. What is the time period to shift for use of Furnace Oil in the existing Unit?

All the existing industries located other than in severely polluted areas and non-attainment cities shall shift to use of cleaner fuel with low Sulphur content such as Low Sulphur Heavy Stock (LSHS) / Light Diesel Oil (LDO) / gas replacing Furnace oil by 12th April, 2026.

13. Consent to Operate - Major Minerals Mines

1. **What are the major mineral mines of Odisha?**

   Coal, Chromite, Iron ore, Manganese ore, Bauxite, Limestone and Dolomite and other industrial use minerals are the major mineral mines of Odisha.

2. **Which environmental laws apply to the mining operation in Odisha?**

   The Water (PCP) Act, 1974, Air (PCP) Act, 1981, Environment (Protection) Act, 1986 and various Rules framed thereunder, are applicable to all the mines.

3. **How are the Water (PCP) Act, 1974 and Air (PCP) Act, 1981, applicable to mines?**

   All the mines must obtain Consent to Establish (CTE) and Consent to Operate (CTO) from SPCB under the Water (PCP) Act, 1974 and Air (PCP) Act, 1981.

4. **How the Environment (Protection) Act, 1986 is applicable to the mines?**

   Mines must comply with emission and wastewater discharge standards prescribed under Environment (Protection) Rules are applicable to the mines.

5. **Whether Waste Management Rules notified under the Environment (Protection) Act, 1986 are applicable to the mine?**

   Yes. Mines must comply with Waste Management Rules like Hazardous and Other Waste Management Rule, 2016, Biomedical Waste Management Rules, 2016, Plastic Waste Management Rules, 2016, E-waste Management Rules, 2016, Battery Waste Management Rules, 2022 are applicable to the mines.

6. **Whether Solid Waste Management Rule, 2016 and Construction Waste Management Rules, 2016 are applicable to the mines?**

   Yes. Solid Waste Management Rule, 2016 and Construction Waste Management Rules, 2016 are applicable to the mines, if there is any township inside the mine lease area.

7. **Do all major mineral mines require Consent to establish (CTE) and Consent to operate (CTO) from SPCB?**

   Yes. All the major mineral mines require CTE and CTO from the State Pollution Control Board (SPCB), Odisha for establishment and operation of mine respectively.

8. **Do all major mineral mines require authorisation under Biomedical Waste Management Rules, 2016?**

   Yes. Those mines having hospitals/Dispensaries/ Clinics/ Patho labs/ or any other clinical establishment generating biomedical waste inside the mine lease area, need to obtain authorisation under the Biomedical Waste Management Rules, 2016.

9. Do all major mineral mines require authorisation under Hazardous and Other Waste Management Rules, 2016?

Those mines having Maintenance workshop generating hazardous waste like Used oil/ Waste oil/ Oily sludge/ Waste containing Oil/or any other hazardous waste as per Rules inside the mine lease area, need to obtain authorisation under the Hazardous and Other Waste Management Rules, 2016.

10. What is the difference between CTE and CTO?

CTE is required to be obtained before establishment of the mine (after grant of temporary lease) and before development of the mine. CTO is required for operation of the mine.

11. What is the meaning of starting of operation of a mine?

Starting operation of a mine means excavation of topsoil and overburden and carrying out mining operation by installing mining equipment like crushers, screens, onsite ore washing and beneficiation, etc.

12. What is the application procedure for CTE and CTO?

Both CTE and CTO can be applied only through online mode. One has to visit the online consent management system of SPCB (https://odocmms.nic.in/) for submitting CTE/ CTO application.

13. Does the mine require separate CTE and CTO for all mining equipment like Crushers and screens?

All the facilities like crushers and screening plants, washing plants, beneficiation plants existing inside the mine lease area are included in one CTE and one CTO order. However, such facilities existing outside the mine lease area are required to obtain separate CTE and CTO.

14. What is the validity of a CTE? Is CTE of a mine required one time?

Validity of a CTE is five years. And it is one time for the mine lease area and production capacity for which it is granted. If there is an increase in mine lease area or production capacity, fresh CTE is needed.

15. Does any mine require permission from local authority like Gram Panchayats or Municipalities for its establishment?

No. Mines do not require any permission from local authority like Gram Panchayats or Municipalities. However, it must have a temporary lease granted by Department of Steel and Mines.

16. What documents are required with the CTE application?

The mine lease holder needs to upload the following documents along with the CTE application.

Temporary mine lease

Mining plan

Draft project report

Site Map

Layout plan

Mining process details including Topsoil and OB management

CTE Fee payment details

17. What documents are required with the CTO application?

The mine lease holder needs to upload the following documents along with the CTE application.

Environmental Clearance from MoEF&CC or SEIAA

Forest Clearance from MoEF&CC

CTE from SPCB.

Mine lease deed

Mining Plan

CGWA clearance drawal of ground water, if any

Clearance from Department of Water Resources for drawal of surface water, if any

Compliance to CTE conditions

Any other clearances if mentioned in the EC or CTE

CTO Fee payment details

18. Is there any notification about approval of CTE/CTO fee structure for the mines?

Yes, CTE/CTO fee structure has been notified by the Department of Forest, Environment and Climate Change, Government of Odisha on 16th July 2012. This fee structure is liable to be changed from time to time.

19. Whether CTE/ CTO fee can be paid in the form of a demand draft or cheque?

No. CTE/CTO fee are to be paid only though online mode. Linkage for fee payment is available in the Online Consent Management System (OCMMS) of SPCB.

20. How is the CTE/CTO fee of a mine calculated?

CTE/CTO fee of any mine id calculated based on its production capacity (RoM) and Mine lease area (in Ha) and whichever fee is higher is to be deposited as CTE/CTO fee along with the applications.

21. How is the CTE/CTO fee calculated based on mine lease area?

CTE/CTO fee of the major mineral mines (based on mine lease area) is calculated as per the following Table.

Sl. No.	Leasehold Area in Ha	CTE fee in Rs.			CTO fee / annum in Rs.		
		Water	Air	Total	Water	Air	Total
1	Up to 5 Ha	3,000	3,000	6000	3,000	1,500	4500
2	5 Ha to less than 25 Ha	10,000	10,000	20000	10,000	5,000	15000
3	25 Ha to less than 100 Ha	30,000	30,000	60000	30,000	15,000	45000
4	100 Ha to less than 500 Ha	50,000	50,000	100000	50,000	25,000	75000
5	500 Ha to less than 1000 Ha	1,00,000	1,00,000	200000	1,00,000	50,000	150000
6	More than 1000 Ha	1,50,000	1,50,000	300000	1,50,000	75,000	225000

22. How is the CTE/CTO fee calculated based on production capacity?

CTE/CTO fee of the major mineral mines (based on production capacity) is calculated as per the following Table.

Sl. No.	Name of the Minerals	CTE fee in Rs.	CTO fee in Rs.
1	Manganese/Chromite	1.0 × P	0.50 × P × N
2	Iron/Bauxite/Coal	0.4 × P	0.20 × P × N
3	Dolomite/Limestone	0.2 × P	0.10 × P × N
4	Other Minerals	0.1 × P	0.05 × P × N

P=Production capacity in tons per annum

N= No. of years for which CTO is applied

23. Is there any provision of penalty for delay in submission of CTO application beyond expiry?

Yes. There is a provision of penalty for delay in submission of CTO application for renewal. Details of the penalty is mentioned in the following Table.

Sl. No.	Period of applying	One time additional as late fee
1.	Up to 120 days of the expiry	Nil
2.	Beyond 120 days of Expiry	10% of the fee per month of delay

This penalty provision is revised from time to time.

24. CTO application is disposed in how many days.

As per the provisions of the Water (PCP) Act, 1974 and the Air (PCP) Act, 1981, the timeline for disposal of CTO application is 120 days from the date of receipt of complete application. However, under the "Ease of doing business", the timeline is fixed at 60 days.

25. If the mine owner allows any external agency to set up mineral processing units like Crushers, Screening plants, Washing plants, Beneficiation plants, Railway sidings inside its mine lease area, then who will apply for CTE/CTO?

The Mine owner is responsible for appling for CTE/CTO for all the establishments inside the mine lease area.

26. Can a mine owner have a washing plant/ beneficiation plant inside the mine and its tailing pond outside?

Yes. In such a case, the mine owner will have to obtain EC, CTE/CTO for the tailing pond separately for the outside land following due procedure and due agreement with the landowner. In case the outside land belongs to another mine, then the second mine will obtain EC, CTE/CTO for the tailing pond with due agreement with the first owner.

27. Can a mine owner operate a railway siding outside its mine lease area, which belongs to Indian railways?

Yes. In such a case, Indian railways must obtain CTE/CTO from SPCB for Railway siding operation.

28. What is the legal provision if any mine owner establishes / operates a mine without obtaining CTE/CTO?

The mine will be closed by SPCB through issuing a closure order under section 33A of the Water (PCP) Act, 1974 and 31A of Air (PCP) Act, 1981.

29. What action a mine owner will take if it is aggrieved with the decision of SPCB?

If any mine owner is aggrieved with any decision of SPCB, can file an appeal before the State Appellate Authority.

The court and office of the Appellate Authorities are functioning at Toshali Bhawan, A-2 Block, 2nd Floor, Satya Nagar, Bhubaneswar, Odisha - 751007.

14. Authorisation for Waste Management

1. What is authorization?

Authorization as per the Ministry of Environment, Forest and Climate Change (MoEF&CC) of India refers to the official permission or approval granted by a competent authority under various environmental laws, rules, or regulations for activities that may have environmental implications. These authorizations ensure compliance with environmental standards and are mandatory for industries, businesses, and other entities engaged in operations that could impact the environment.

2. What is the purpose of authorization?

Authorization aims to environmental safeguards in to industrial & west management activities, thereby helping in pollution control, conservation of natural resources, and sustainable development.

3. What are different types of authorization?

The MoEF&CC, GoI mandates various types of authorizations depending on the nature of activities conducted by an organization or individual, especially those that generate, handle, transport, treat, or dispose of

Hazardous waste

Biomedical waste &

Municipal Solid Waste

4. What is the difference between Authorization and Consent to Operate?

Consent to Operate (CTO): A broader permission required by all industrial units to operate legally under the Water (PCP) Act and Air(PCP) Act.

Authorization: A specific permission for managing certain types of waste (e.g. hazardous, biomedical, municipal solid waste) under the Environmental (Protection) Act and associated Rules.

14.1 Biomedical Waste Management

1. **What is health care facility/ Establishment?**

   Health care facility/ Establishment refers to any place where diagnosis, treatment or immunization of human beings or animals is provided regardless of the type and size of the health treatment system including any research activity pertaining thereto.

2. **What is Biomedical Waste?**

   Biomedical waste refers to any waste, generated during the diagnosis, treatment or immunization of human beings or animals or research activities pertaining thereto or in production or testing of biological or in health camps.

3. **For a Health Care Establishment (HCE), what are the Clearances/ Permissions required to be obtained from the SPCB?**

   HCEs are required to obtain Consent to Establish (CTE), Consent to Operate (CTO) and Authorization from the Board as applicable.

4. **What do you mean by authorization?**

   Authorization refers to the permission granted by the State Pollution Control Board for the generation, collection, reception, storage, transportation, treatment, processing, disposal or any other form of handling of Bio-medical Waste.

5. **What if the Health Care Establishment (HCE) has no Beds, what are the permissions it needs to obtain?**

   For non-beded HCE, it need to obtain only Authorization from the SPCB. This authorization is one-time and shall be granted by the concerned ROs of SPCB.

6. **What procedure I need to follow for the grant of the Authorization for a Non-bedded Facility?**

   You need to apply for authorization online at www.odocmms.nic.in along with your land details, lease deed, KML file, agreement Common Bio-medical Waste Treatment and Disposal Facility (CBWTDF).

7. **I want to Establish a HCE with Beds, what permissions I need to obtain from the SPCB?**

   You are required to obtain Consent to Establish (CTE) if it is $\geq$ 30 Beds. Once the construction of the facility is over, then you have to apply for Consent to Operate (CTO) and Authorization.

8. **If my HCE will be < 30 Beds, what are the permissions I need to obtain?**

   You are required to obtain only authorization from the SPCB when the facility is ready for operation. The authorization will be granted by the Head office of SPCB. You have to apply online at www.odocmms.nic.in along with your land details, lease deed, KML file, agreement with CBWTDF and payment of required fees.

9. If my HCE is > 30 Beds and I have obtained CTE, what are the permissions to be obtained before operation?

You have to obtain CTO & also Authorization from the SPCB.

10. What are the requirements while applying for CTO & Authorization?

Payment of required fees, Land details/ lease deed/ agreement with the house owner/ KML file and copy of agreement with CBWTDF clearly showing number of Beds along with validity while applying online at www.odocmms.nic.in.

11. How much Consent and authorization fee needs to be paid?

A Fee structure as approved by the State Government is available on the website of SPCB at www.ospcboard.org.

12. What are the most important things required to be complied before grant of CTO?

Compliance of Consent to Establish Conditions (CTE) and installation of Effluent Treatment Plant (ETP)/ Sewage Treatment Plant (STP) for the treatment of waste water generated from the Hospital. This is verified by SPCB before granting CTO.

13. What is the most important requirement for grant of Authorization?

Agreement with the CBWTDF clearly indicating it's validity and number of Beds of the Hospital.

14. What are the basic things that SPCB verifies during routine inspections?

i) Waste water treatment facilities adopted by the HCE;
ii) Provision of Colour coded bins for proper segregation of the BMW waste;
iii) Waste storage area;
iv) Needle cutters/ destroyers;
v) Records of generation and disposal of BMW wastes

15. My HCE has valid authorization and I want to shift to a new location. What action I have to take?

Yes. You are required to obtain fresh authorization for the new location in suppression to the existing Authorization.

14.2 Hazardous Waste Management

FAQs on Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and amendments thereafter.

1. **What is considered hazardous waste under Indian environmental law?**

   Hazardous waste is defined as waste that poses danger to human health or the environment due to its toxic, reactive, corrosive, flammable, or infectious characteristics. The complete list is notified under Schedule I and II of the Hazardous and Other Wastes (Management and Transboundary Movement) (HOWM) Rules, 2016.

2. **Which rules govern hazardous waste management in India?**

   Hazardous waste management is governed by the:

   Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 (MoEF&CC)

   Regulations and guidelines issued by CPCB and enforced by State Pollution Control Boards (like SPCB Odisha).

3. **How does this align with international agreements?**

   These rules align with:

   Basel Convention (on transboundary movement of hazardous waste)

   India's commitments to environmentally sound waste management and illegal traffic prevention

4. **How are these rules enforced?**

   Enforcement authorities include:

   Central Pollution Control Board (CPCB)

   State Pollution Control Boards (SPCBs)

   Ministry of Environment, Forest & Climate Change (MoEF&CC)

   These agencies conduct inspection, audits, and impose penalties for non-compliants

5. **What are the key forms used under these rules?**

   Form 1 : Application for Authorization.

   Form2 : Grant of Authorization.

   Form 3 : Maintenances of Records.

   Form 4 : Filling Annual Return.

   Form 5 : Application for import or export of hazardous and other waste

   Form 6 : Trans-boundary movement-movement document

Form 7 : Application form for one time authorization traders for part-D of schedule III waste

Form 7A : Form for Grant of One-time Authorization by State Pollution Control Board to Traders who are importing the waste mentioned in part D of schedule III

Form 8 : Labelling of containers of hazardous and other waste

Form 9 : Transport emergency (trem) card

Form 10 : Manifest for hazardous and other waste

Form 11 : Format for reporting accident

Form 12 : Application for filing appeal against the order passed by state pollution control board

6. What is the objective of these Rules?

The rules ensure environmentally sound management of hazardous & other waste, regulate their import/export, transboundary movement, and present environmental & health risks.

7. What are 'other wastes' specified under this rule?

Wastes specified in Part B and Part D of Schedule III for import or export and includes all such waste generated indigenously within the country

"Other wastes" include:

Waste Electrical and Electronic Equipment (WEEE)

Used lead-acid batteries

Used tyres

Paper waste

Metal scraps

Other items mentioned in Schedules III, IV, and VI of the rules

8. Who is responsible for waste management under these rules?

Any person with control over the premises generally handling hazardous or other waste. This includes:

Occupiers

Transporters

Operators of disposal facilities

They must ensure safe handling, storage, and disposal in compliance with the rules.

9. Who is considered the "occupier" under hazardous waste management rules?

The occupier is any person in relation to any factory or premises, means a person who has, control over the affairs of the factory or the premises and includes in relation to any hazardous and other wastes, the person in possession of the hazardous or other waste.

10. What are the general responsibilities of the occupier regarding hazardous waste?

The occupier is responsible for:

Safe handling, storage and disposal of hazardous waste.

Ensuring waste is properly labelled, packaged, and transported.

Preventing accidents and contamination of air, water, or land.

Maintaining records and filing annual returns.

11. What records must a hazardous waste generator maintain?

Every generator must maintain:

Manifest records (Form 10) for each consignment

Monthly/annual waste generation, storage, and disposal data

Copies of Form 3 (waste inventory) and Form 4 (annual return)

Details of authorized transporters and recyclers

12. Who requires authorisation under hazardous waste management rules?

Any industry, facility, or operator involved in:

Generation, collection, storage, packaging, transport, handling treatment, processing, recycling, recovery, preprocessing, co-processing, utilization, offering for sale, transfer or disposal of hazardous waste must obtain authorization from SPCB, Odisha under Rule 6 of the 2016 Rules.

13. What is the purpose of obtaining authorisation?

Authorisation ensures safe & legal management of hazardous waste without harming health or the environment, and to comply with environmental laws.

14. Are there any specific duties of hazardous waste generators?

Yes. Generators must:

Minimize waste generation

Ensure proper collection, storage, and disposal

Maintain records in Form 3 and submit annual returns (Form 4)

Not mix hazardous waste with non-hazardous or biodegradable waste

Ensure disposal only through authorized TSDFs or recyclers/ utilisers.

15. How can one apply for authorisation?

An application must be submitted in Form 1 to the State Board through the online portal of the Board (http://odocmms.nic.in) along with:

Details of operations and processes

Types and quantities of waste handled

Consent to Establish/Operate

Waste inventory

Site layout and safety measures

Storage and disposal plan

Agreement with TSDF/recycler, if required.

16. What is a TSDF?

TSDF stands for Treatment, Storage, and Disposal Facility. It is a CPCB/SPCB-approved facility where hazardous waste is scientifically treated and safely disposed. Odisha currently facilitates disposal through authorized TSDFs located in or outside the state.

17. What types of hazardous waste are handled at TSDFs?

TSDFs manage a wide variety of wastes, including:

Toxic and reactive industrial waste

Incinerable waste

Land-disposable waste

Contaminated packaging or soil

18. What are the main functions of a TSDF?

A TSDF typically performs:

Treatment: Detoxification, neutralization, stabilization

Storage: Temporary and secure holding of waste before disposal

Disposal: Engineered landfilling, incineration, or other final disposal methods

19. What is the role of the occupier/generator in relation to a TSDF?

Waste generators must:

Ensure proper classification and packaging of waste

Transport waste with appropriate documentation

Use only authorized TSDFs for disposal

Retain manifest copies and maintain records

20. Is there a fee for applying?

Yes, a prescribed fee is required and should be submitted with the application. The fee structure is provided by the Board.

21. What is the validity period of the authorisation?

Authorisation is typically granted upto a maximum period of 5 years, subject to the validity of Consent to Operate (CTO), unless otherwise specified. It must be renewed before expiry.

22. Can the authorisation be amended or cancelled?

Yes. SPCB/PCC may:

Amend authorisation based operational or legal changes.

Suspend or cancel authorisation in case of non-compliance or environmental risk.

23. What is the timeline for getting authorisation?

Applications are generally processed within 120 days from the date of submission of a complete application.

24. Is it mandatory to renew the authorisation?

Yes. Renewal must be applied at least 3 months before the expiry of the authorisation.

25. What is the 'manifest system' in hazardous waste transport?

The manifest system is a tracking mechanism for waste movement from source to disposal. Color-coded Form 10 (Manifest) copies distributed to stakeholders (generator, transporter, receiver, SPCB).

26. What wastes are banned for import?

Import of certain hazardous wastes is prohibited, including:

Household waste

Clinical and medical waste

Waste from incineration plants

(See **Schedule VI** for the full list.)

27. Is the authorisation transferrable?

No. Authorisation is not transferrable. In case of change in ownership or management, a fresh application must be submitted.

28. What happens if an entity operates without authorisation?

Operating without valid authorisation is a violation of environmental law and can lead to:

Closure of operations

Legal prosecution

Fines and penalties

29. Is it mandatory to store hazardous waste separately?

Yes. Hazardous and other wastes must be stored separately, in clearly designated and labelled areas, to prevent unwanted reactions, leaks, or contamination.

30. What are the general requirements for hazardous waste storage?

The storage area must:

Be leak-proof and covered

Have impermeable flooring

Be well-ventilated

Include fire safety systems and spill control measures

Be clearly labelled with hazard symbols and waste type

31. What is the maximum duration hazardous waste can be stored?

Hazardous waste can generally be stored for 90 days, extendable upto 365 days depending upon the quantum waste and final disposal options. However, further extensions may be granted by the Board under specific conditions.

32. What labelling is required on hazardous waste containers?

Each container must have:

- Waste category
- Date of generation
- Contents and quantity
- Name and address of the occupier
- Hazard symbols as per GHS norms

33. Can hazardous waste be stored in open areas?

No. Open storage is strictly prohibited. Waste must be stored in covered, secured enclosures to avoid contact with rainwater or unauthorized access.

34. Are secondary containment measures required?

Yes. Storage area have bund walls, trays or dykes as secondary contamination to capture leaks or spills and prevent environmental contamination.

35. Is there a requirement for emergency preparedness in the storage area?

Yes. The occupier must:

- Install fire extinguishers, spill kits, and emergency alarms
- Display emergency contact numbers
- Train staff in hazardous material handling and emergency response

36. What records must be maintained for storage?

Occupiers must maintain records of:

- Type and quantity of waste stored
- Duration of storage
- Date of dispatch for treatment or disposal

These records must be made available for inspection.

37. Can different types of hazardous waste be stored together?

No. Incompatible wastes must be stored separately to prevent chemical reactions and fire. Storage compatibility must follow safety data sheet (SDS) recommendations.

38. Who is responsible for the safety of the storage area?

The occupier is fully responsible for ensuring the safety, integrity, and regulatory compliance of the hazardous waste storage facility.

39. What does "utilisation" of hazardous waste mean?

Utilisation refers to the process of using hazardous and other wastes as a resource.

Co-processing use of waste in manufacturing processes for the purpose of energy or resource recovery or both. (e.g., cement kilns or power plants).

40. Is there any SOP or guideline for actual users of hazardous waste?

Yes. The Central Pollution Control Board (CPCB) issued Standard Operating Procedures (SOPs) under the rule 9 of HOWM rules, 2016 & various guidelines for utilization and recycling of Hazardous wastes that must be followed by actual users. These SOPs cover:

- Waste handling and storage
- Safety precautions
- Emission control
- Record maintenance
- Environmental monitoring

41. Is authorisation required for waste utilisation?

Yes. Any industry intending to utilise hazardous or other wastes must obtain authorisation from the State Pollution Control Board (SPCB). Additionally, prior approval from the Central Pollution Control Board (CPCB) is required for specific waste streams where SOPs are not available.

42. Is co-processing in cement kilns allowed for hazardous wastes?

Yes, Certain hazardous waste with high calorific value can be co-processed in cement kilns or industries. Prior approval must be obtained, and the process must be follow CPCB guidelines regarding emissions, feeding systems, and trial runs.

43. Do industries need to follow any standards while utilising hazardous wastes?

Yes. Utilisation must comply with:

- Emission standards
- Material safety guidelines
- CPCB's standard operating procedures (SOPs)
- Specific conditions in the authorisation/approval

44. What documents are needed to apply for approval of waste utilisation?

Common documents include:

- Process description
- Waste characterization report
- CPCB developed SOPs / Guidelines for utilization of required Hazardous Waste/ Trial run results (if applicable)
- Material balance and emission data
- Safety and environmental management plans

45. Are trial runs required for new waste utilisation processes?

Yes. Trial runs are required to demonstrate the technical feasibility and environmental safety of the proposed utilisation method before regular utilization/operation are allowed.

46. What if an industrial unit utilises waste without approval?

Utilising hazardous waste without approval is a **serious violation** and may lead to:

- Revocation of permits
- Fines
- Legal action
- Shutdown orders

47. Is record-keeping mandatory for waste utilisation?

Yes. Units must maintain detailed records of:

- Quantity of waste received and utilised
- Source and destination of waste
- Environmental monitoring data

These must be submitted in annual returns and made available during inspections.

48. What is required to handle hazardous waste?

Entities must:

- Obtain authorization from the State Pollution Control Board (SPCB)
- Maintain records of waste generation and disposal
- File annual returns

49. Are there restrictions on the import/export of hazardous waste?

Yes. Import/export is regulated:

- Prior informed consent (PIC) is mandatory for certain categories
- MoEF&CC (Ministry of Environment, Forest and Climate Change) approval is needed
- Compliant with Basel Convention

50. Is it allowed to import hazardous waste for recycling?

Yes, but only by authorised recyclers and importers. They must:

- Obtain authorization from SPCB and permission from CPCB or MoEF&CC as applicable.
- Follow Schedule IV (for recyclable waste) and Schedule VIII (for imports)
- Maintain records of source, processing, and product sales
- Submit annual returns and comply with all safety/environmental norms

51. Where can I find the list of authorized TSDFs and recyclers?

The list of authorized TSDFs and registered recyclers is published by CPCB on its website (https://cpcb.nic.in) and SPCB, Odisha (https://ospcboard.odisha.gov.in/) and updated periodically.

52. How is hazardous waste transported legally?

Hazardous waste transportation must follow:

Use of authorized vehicles

Accompanied by the manifest (Form 10) with each consignment

Only SPCB-authorized transporters should be used

Properly labeling of the container as per Schedule III of the Rules

53. How is illegal traffic of hazardous waste treated?

Illegal traffic of hazardous waste is a criminal offense, punishable under the Environment (Protection) Act, 1986.

54. How often must records and reports be submitted?

Annual returns to the SPCB by June 30 every year for the preceding financial year

Records must be retained for 3 years

55. What is the role of the Central Pollution Control Board (CPCB)?

CPCB is responsible for:

Issuing guidelines and standard operating procedures (SOPs)

Coordinating with State Pollution Control Boards (SPCBs)/ Pollution Control Committee (PCCs)

Monitoring compliance

56. What is considered an "accident" under the HOWM Rules, 2016?

An accident is any unplanned inccident involving hazardous or other wastes may result in:

Sudden release of hazardous substances

Fire, explosion, or spill

Contamination of air, water, or soil

Injury or death to humans, animals, or damage to property/environment

57. Who is responsible for reporting an accident?

Both the occupier (generator/handler of hazardous waste) and the operator of the facility (like a TSDF or transporter) are both responsible for reporting accidents immediately to the:

State Pollution Control Board (SPCB)

District administration and other relevant authorities

58. What details must be included in an accident report?

Under the HOWM Rules, An accident shall be reported as per Form 11 and should include:

- Date, time, and location of the incident
- Type and quantity of waste involved
- Cause of the accident
- Impact on health/environment/property
- Emergency measures taken
- Preventive steps to avoid recurrence

59. Are there penalties for not reporting accidents?

Yes. Failure to report can lead to:

- Revocation of authorization or permits
- Fines and legal action under the Environment (Protection) Act, 1986
- Criminal prosecution for severe violations

60. What are the responsibilities post-accident?

The occupier or operator must:

- Take immediate containment and mitigation measures
- Notify and cooperate with local emergency services
- Conduct a root cause analysis
- Submit a corrective action plan
- Review and update the emergency preparedness plan

61. What is the National Hazardous Waste Tracking System (NHWTS)?

The NHWTS is a centralized digital platform developed by CPCB to track the generation, storage, transport, treatment, and disposal of hazardous and other wastes across India. It aims to ensure real-time monitoring and compliance under the HOWM Rules, 2016.

62. What is the purpose of NHWTS?

NHWTS is intended to:

- Digitally track waste movement from source to disposal
- Prevent illegal dumping or mishandling
- Improve transparency and data reporting
- Ensure regulatory compliance by generators and TSDFs

63. Who is required to use the NHWTS?

All key stakeholders in hazardous waste management must register and use NHWTS:

- Waste generators (industries, hospitals, labs)

Transporters

Operators of Treatment, Storage, and Disposal Facilities (TSDFs)

SPCBs and CPCB (for regulatory oversight)

64. What activities are tracked by the system?

The NHWTS tracks:

Waste generation (type, quantity, category)

On-site storage and treatment

Transport details and route

Arrival at TSDF or recycler

Final disposal method used

65. Is NHWTS integrated with GPS or real-time data?

Yes, integration with GPS-enabled tracking of waste transportation vehicles is available or under implementation in many regions, ensuring real-time visibility of waste movement.

66. How can a user register on NHWTS?

Registration is typically done via the CPCB/State Board portal with:

Company details

Authorization under HOWM Rules

Type and category of waste handled

Contact information of responsible personnel

67. What happens in case of non-compliance with NHWTS usage?

Non-compliance may lead to:

Suspension or revocation of authorization

Penalties/fines under the Environment (Protection) Act, 1986

Legal action for falsification or avoidance

68. What is Extended Producer Responsibility (EPR)?

EPR is a policy where producers are held legally responsible for managing the entire life cycle of their product, especially the post consumer (waste) stage. It promotes environmentally sound collection, recycling, or disposal.

CPCB has developed dedicated online portals to facilitate registration, tracking, and compliance for various waste categories:

Plastic Waste: For registration and compliance under the Plastic Waste Management Rules.

E-Waste: To manage electronic waste as per the E-Waste (Management) Rules.

Battery Waste: For handling waste batteries under the Battery Waste Management Rules.

Used Oil: To oversee the management of used oil waste.

Waste Tyres: For the regulation of tyre waste.

69. Who is considered a "Producer" under EPR?

A producer is refers to any manufacturer, importer, or brand owner (PIBO) who introduces products (such as plastics, electronics, or batteries) into the market.

70. What are producers required to do under EPR?

Producers must:

Register on the CPCB EPR portal

Meet annual collection and recycling targets

Ensure environmentally sound recycling or disposal

Submit compliance reports and certificates

Work with authorized recyclers and collection centres

71. What happens if a producer fails to comply with EPR obligations?

Non-compliance may lead to:

Financial penalties (environmental compensation)

Cancellation of registration

Prosecution under the Environment (Protection) Act, 1986

Loss of market access

72. What is an EPR certificate?

An EPR certificate - is a document issued by an authorized recycler confirming that a certain quantity of waste has been properly collected and treated or recycled on behalf of a producer to fulfill EPR obligations.

73. What is "used oil"?

"Used oil" refers to any mineral-based or synthetic oil that has been used and is no longer suitable for its original purpose due to the presence of impurities, loss of original properties, or contamination. Examples: used engine oil, gear oil, transmission fluids, hydraulic oils, etc.

74. What is EPR for used oil?

EPR (Extended Producer Responsibility) for used oil mandates producers, importers, and blenders of base oil / lubricating oil to ensure environmentally sound collection, safe handling, and recycling of used oil.

75. Who is covered under EPR for used oil?

Entities required to comply with EPR include:

Producers of base/lubricating oils

Importers of lubricants

Dealers and assemblers of equipment containing such oil

Bulk consumers, service centres, and collection agents

76. What are the key obligations under EPR for used oil?

EPR holders must:

Register on the CPCB's EPR portal

Ensure collection of used oil in proportion to sales

Route collected oil only to authorized recyclers

Submit periodic returns and compliance reports

Buy EPR certificates from CPCB-registered recyclers

77. What are EPR certificates in used oil management?

EPR certificates are issued by authorized recyclers to producers/importers, certifying that a certain quantity of used oil has been collected and re-refined. These are used by EPR entities to meet their compliance targets.

78. Who can issue EPR certificates?

Only registered used oil recyclers who have:

Environmental clearance

Valid consents

Compliance history

can issue EPR certificates through the CPCB portal.

79. What happens in case of EPR non-compliance for used oil?

Non-compliance may result in:

Financial penalties under the Environment (Protection) Act

Cancellation of registration

Legal action for repeated or serious violations

80. What is EPR for waste tyres?

EPR for waste tyres mandates legal responsibility on producers, importers, and recyclers (of tyres) to take responsibility for environmentally sound collection, recycling, and disposal of waste generated from their products after use.

81. Who is obligated under EPR for waste tyres?

Entities covered under this EPR framework include:

Tyre manufacturers (OEMs)

Importers of new or used tyres

Auto manufacturers supplying tyres

Tyre recyclers and retreaders

82. What is the purpose of implementing EPR for tyres?

The key objective are to:

- Prevent illegal dumping or burning of waste tyres
- Encourage recycling and recovery of materials
- Promote a circular economy
- Comply with national and international environmental standards

83. What is the CPCB's role in tyre EPR?

CPCB is responsible for:

- Registering producers, importers, and recyclers
- Monitoring compliance through the EPR portal
- Issuing and verifies EPR certificates
- Taking regulatory action against non-compliance

84. What are the key obligations for producers/importers?

They must:

- Register on the CPCB waste tyre EPR portal
- Meet annual collection & recycling targets based on sales
- Purchase and submit EPR certificates from registered recyclers
- Maintain and report detailed records of tyre sales and waste management

85. What are EPR certificates and how do they work?

EPR certificates are digital documents issued by registered tyre recyclers through the CPCB portal, certifying that a specified quantity of waste tyres has been recycled or recovered.Producers/importers must buy and submit these certificates to meet their targets.

86. What are the methods of waste tyre recycling under EPR?

Accepted recycling and recovery processes include:

- Pyrolysis (thermal decomposition)
- Crumb rubber production
- Retreading
- Co-processing in cement kilns
- Material recovery and energy recovery

87. What happens if an entity fails to meet EPR targets?

Non-compliance may result in:

- Financial penalties
- Suspension/cancellation of registration
- Legal action under the Environment (Protection) Act, 1986

88. How can entities register for tyre EPR?

Entities must apply online via the CPCB EPR portal for waste tyres with:

- GST details
- Product information
- Waste generation projections
- Recycling agreements (if applicable)

89. What is EPR for waste batteries?

EPR for waste batteries means that producers (manufacturers/importers) of batteries are legally responsible for the collection, recycling, or refurbishment of waste batteries and ensuring their environmentally sound management.

90. Which batteries are covered under these rules?

The Battery Waste Management Rules, 2022 apply to:

- Portable batteries (e.g., AA/AAA, mobile phone batteries)
- Automotive batteries (used in vehicles)
- Electric Vehicle (EV) batteries
- Industrial batteries (for backup power, etc.)

91. Who is obligated under EPR for batteries?

Entities required to comply under Battery Waste Management Rule, 2022 include:

- Producers (battery and equipment manufacturers/importers)
- Recyclers and refurbishers
- Consumers and bulk consumers

92. What are the responsibilities of producers under EPR?

Producers must:

- Register on the Battery EPR portal of CPCB
- Meet collection and recycling targets annually
- Submit EPR compliance reports
- Ensure disposal through authorized recyclers/refurbishers
- Obtain and use EPR certificates

93. What is an EPR certificate for batteries?

It is a digital certificate issued by authorized recyclers or refurbishers, confirming the environmentally safe processing of a specific quantity of waste batteries. Producers use these certificates to fulfil their EPR obligations.

94. How does the CPCB battery EPR portal work?

The portal enables:

- Online registration of stakeholders
- Uploading battery sales and return data
- Tracking of battery collection and processing
- Generation and trading of EPR certificates

95. What are the environmental goals of this EPR system?

Prevent leakage of toxic substances (lead, mercury, lithium, etc.)

Promote safe recycling of valuable metals

Reduce landfill waste and pollution

Encourage reuse/refurbishment where possible

96. What happens if a producer fails to meet EPR targets?

Non-compliance may result in:

Environmental compensation (fines)

Suspension of EPR registration

Legal action under the Environment (Protection) Act

97. What is the Public Liability Insurance Act, 1991 (PLI Act)?

The PLI Act mandates that owners handling hazardous substances must take out insurance policies to provide immediate relief to persons affected by accidents (death, injury, or property damage) resulting from the handling of such substances.

98. How is "hazardous substance" defined under this Act?

It refers to any substance or preparation that, due to its chemical or physicochemical properties or handling, is liable to cause harm to human beings, other living creatures, property, or the environment.

99. Why was the PLI Act enacted?

The Act was introduced in the aftermath of the Bhopal Gas Tragedy (1984) to ensure that victims of chemical accidents receive quick compensation without needing to prove negligence in court.

100. Who is covered under the PLI Act?

Any owner or occupier of an industrial unit, transporter, warehouse, or facility handling hazardous substances in quantities notified under the Environment (Protection) Act, 1986.

101. What are the key obligations under the Act?

Owners handling hazardous substances must:

Take a public liability insurance policy covering their operations

Renew the policy annually

Pay an amount equal to the annual premium to the Environmental Relief Fund (ERF)

Display emergency procedures and safety measures

Notify authorities and assist victims in case of accidents

102. What is the Environmental Relief Fund (ERF)?

ERF is a fund created under the Act to disburse compensation to accident victims. It is funded by contributions made by owners in addition to their insurance premium.

103. How much compensation is provided under the Act?

As per the latest provisions:

Death: ₹25,000 + ₹12,500 for funeral expenses

Injury: Actual medical expenses up to ₹12,500

Property damage: Upto ₹6,000

This compensation is interim; victims can pursue additional compensation through civil courts.

104. What are the consequences of non-compliance?

Failure to comply insurance or contribute to the ERF may result in:

Imprisonment up to 6 years

Fines or both

Closure of operations by authorities

105. Who administers and enforces the PLI Act?

Enforcement is carried out by:

District Collector/Sub-Divisional Magistrates

State Pollution Control Boards (SPCBs)

Central Pollution Control Board (CPCB) (in advisory roles)

106. What are the MSIHC Rules, 1989?

The Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 regulate the manufacture, handling, storage, and import of hazardous chemicals to prevent major industrial accidents and ensure public and environmental safety.

107. What is a "hazardous chemical" under these rules?

Any chemical listed in Schedules 1, 2, or 3 of the rules that poses risks to human health, safety, property, or the environment due to its:

Toxicity

Flammability

Reactivity

Explosive potential

108. Who needs to comply with MSIHC Rules?

Any person or industry that:

Manufactures, handles, or stores hazardous chemicals

Imports hazardous chemicals

Is involved in industrial activity using such chemicals above prescribed threshold quantities

109. What are the key obligations under MSIHC Rules?

Industries must:

Identify and assess risks of handling hazardous chemicals

Prepare and submit a Safety Report

Prepare an On-Site Emergency Plan

Notify authorities of any accident

Inform workers and the public about risks

Label containers and maintain safety data sheets (SDS)

110. What is a Safety Data Sheet (SDS)?

An SDS is a document providing details on:

Chemical composition

Hazards

Safe handling and storage

First aid and firefighting measures

Spill or leak response

It must be accessible to workers and emergency responders.

111. What is the threshold quantity for applicability?

Different chemicals have different threshold quantities listed in Schedule 2 and Schedule 3 of the MSIHC rules. If the quantity exceeds these thresholds, stricter safety and reporting requirements apply.

112. What is the purpose of the Safety Report?

The Safety Report refers to:

Assesses major accident hazards

Evaluates control measures

Details safety management systems

It must be submitted to authorities like the Director of Factories and Boilers and SPCB.

113. What is the On-site and Off-site Emergency Plan?

On-site Emergency Plan: Prepared by the occupier, covering response measures within the premises.

Off-site Emergency Plan: Prepared by the District Collector/Authority, addressing risks to surrounding communities.

114. Are importers of hazardous chemicals covered under MSIHC Rules?

Yes. Importers must:

Notify the concerned authority before import

Ensure the chemical is accompanied by SDS and labelling

Follow all applicable handling and storage precautions

14.3 Plastic Waste Management

1. **What laws govern plastic waste management in Odisha?**

   Plastic waste is regulated under:

   Plastic Waste Management (PWM) Rules, 2016, as amended in 2018 and 2022

   Environment (Protection) Act, 1986

   Oversight by Central Pollution Control Board (CPCB) and SPCB, Odisha

2. **Who are the key stakeholders under the PWM Rules?**

   Key stakeholders include:

   Producers, Importers & Brand Owners (PIBOs)

   Plastic Waste Processors (recyclers/co-processors)

   Manufacturers of plastic carry bags/multilayered packaging

   Urban Local Bodies (ULBs) & Gram Panchayat

   Retailers and consumers

3. **What are the registration requirements for plastic producers and brand owners?**

   Producers, Importers & Brand Owners, Plastic Waste Processors, Manufacturers of Plastic Raw Materials, Importers of Plastic Raw Materials, Micro & Small Producers and Sellers of Plastic Raw Materials engaged in plastic packaging must:

   Register with SPCB, Odisha (if operating within Odisha) or CPCB (if operating in multiple States)

   Apply via the EPR Portal

   Submit EPR (Extended Producer Responsibility) Plans and annual returns

4. **What is Extended Producer Responsibility (EPR) in plastic waste?**

   EPR mandates that Producers, Importers & Brand Owners (PIBOs), Plastic Waste Processors (PWPs), Manufacturers of Plastic Raw Materials, Importers of Plastic Raw Materials, Micro & Small Producers and Sellers of Plastic Raw Materials engaged in plastic packaging are responsible for collection, recycling, or safe disposal of plastic waste generated due to their products.

   They must:

   Meet annual EPR targets

   Engage registered recyclers/co-processors

   Upload evidence of plastic waste processed via the EPR portal

5. **Are there restrictions on single-use plastic (SUP)?**

   Yes. As per the MoEF&CC ban (July 1, 2022), the manufacture, import, stocking, distribution, sale, and use of certain SUP items are prohibited, including:

   Plastic cutlery, straws, plates, trays

Wrapping films less than 100 microns

Polystyrene foam items

SPCB, Odisha enforces these bans via inspections and penalties.

6. What are the minimum thickness requirements for plastic carry bags?

Carry bags made of virgin or recycled plastic must be at least 120 microns in thickness to improve reusability and recyclability.

7. Can recycled plastic be used in food packaging?

No. As per PWM Rules and BIS standards, plastic for food-contact applications must be made from virgin plastic only.

8. What are the rules for compostable plastic bags?

Manufacturers of compostable plastic must:

Obtain CPCB certification

Print "Compostable" on the bags

Ensure testing from Central Institute of Plastics Engineering & Technology (CIPET) or other approved labs.

9. What are the responsibilities of Urban Local Bodies (ULBs)?

ULBs must:

Ensure door-to-door collection and segregation

Set up or support Material Recovery Facilities (MRFs)

Engage rag pickers, SHGs, and recyclers

Submit annual reports online to SPCB through national dashboard of plastic waste management developed by CPCB

10. How are plastic waste recyclers regulated in Odisha?

Plastic Waste Processors (recyclers/co-processors) must:

Register with SPCB, Odisha via the EPR portal

Follow CPCB SOPs for plastic waste processing

Submit quarterly and annual returns

Ensure that processing units are equipped with pollution control measures

11. What is the role of SPCB, Odisha in enforcement?

SPCB, Odisha:

Registers PIBOs and recyclers under EPR

Conducts inspections and audits

Monitors compliance with bans and EPR targets

Can impose penalties under Section 5 of the Environment Act, 1986

12. What records must PIBOs and recyclers maintain?

They must maintain:

EPR implementation data

Proof of plastic waste processed (invoices, agreements, recycler certificates)

Annual Reports filed via EPR Portal

Copies of registration and compliance certificates

13. How is plastic waste typically disposed of?

Permissible disposal methods include:

Recycling (mechanical or chemical)

Co-processing in cement kilns

Waste-to-energy incineration (only for non-recyclables)

Road construction using plastic waste (as per IRC guidelines)

14. Where can stakeholders register and monitor compliance?

Registrations and compliance reporting must be done through CPCB EPR Portal: https://eprplastic.cpcb.gov.in

For state-specific queries, visit SPCB, Odisha portal: https://ospcboard.org

For Annual return: https//suppwmdashboard.in

14.4 E-Waste Management

1. **What is e-waste?**

   E-waste or electronic waste includes discarded Electrical and Electronic Equipment (EEE) and their components that are no longer in use or working, such as:

   Computers, printers, mobile phones, televisions

   Refrigerators, air conditioners, washing machines

   Cables, batteries, circuit boards, etc.

2. **Which law regulates e-waste management in Odisha?**

   E-Waste (Management) Rules, 2022 (effective from April 1, 2023)

   Environment (Protection) Act, 1986

   Enforced by CPCB and State Pollution Control Boards (SPCBs)

   SPCB, Odisha is the nodal agency for state-level enforcement

3. **Who must comply with the e-waste management rules?**

   The following stakeholders are obligated under the Rules:

   Producers (manufacturers, importers, brand owners)

   Refurbishers and recyclers

   Bulk consumers (e.g., Govt. departments, large institutions)

   Dismantlers and collection centers

4. **What is Extended Producer Responsibility (EPR) for e-waste?**

   EPR is the obligation of producers to:

   Collect and recycle e-waste generated from their products

   Meet annual recycling targets

   Engage authorized recyclers

   Register on the CPCB E-Waste Portal and submit reports

   Portal: https://eprewastecpcb.in

5. **Is registration with SPCB or CPCB mandatory?**

   Yes.

   The entities shall register on the EPR Portal developed by CPCB in any of the following category, namely: -

   manufacturer;

   producer;

refurbisher; or

recycler.

Operating without registration is illegal.

6. What are the duties of consumers and bulk consumers?

They must:

Not dispose of e-waste in garbage or landfills

Channel e-waste through registered producers, refurbishers or recyclers

Maintain records of e-waste generated and disposed.

7. What is the role of SPCB, Odisha in e-waste regulation?

SPCB, Odisha is responsible for:

Preparing and maintained e-waste inventory

Monitoring EPR compliance as directed by CPCB

Conducting random inspection of recyclers and refurbishers and monitoring recycling capacity utilization

Promoting environmentally sound recycling practices.

8. What is the process for setting up an e-waste recycling or refurbishing unit in Odisha?

Entrepreneurs must:

Obtain Consent to Establish (CTE) & Consent to Operate (CTO) from SPCB, Odisha

Register on the CPCB EPR portal

Submit details of capacity, location, technology, pollution control devices

Comply with environmental and safety regulations

9. How is e-waste to be stored before recycling?

Only EPR registered producers, recyclers and refurbishers may store e-waste

Storage period must not exceed 180 days (extendable with permission)

Facilities must have impermeable flooring, containment systems, and fire safety measures

10. Are informal recyclers allowed under the rules?

No. Informal recycling is prohibited.

Only EPR registered recyclers or refurbishers are permitted to process e-waste in authorized and compliant facility.

11. What are the new features of the E-Waste (Management) Rules, 2022?

Online EPR Portal for registration, tracking, and reporting

Introduction of EPR Certificates tradable among producers

Digital tracking of material flow

Penalties and compensation for non-compliance

Inclusion of refurbishers in the regulatory framework

12. What is an EPR certificate?

A digital certificate issued to recyclers upon processing a quantity of e-waste

Can be sold to producers to help them meet their EPR targets

Tracked through the CPCB EPR portal

13. What are the penalties for non-compliance?

Penalties include environmental compensation, revocation of registration, or legal action

SPCB, Odisha can impose fines under Section 5 of the Environment (Protection) Act, 1986

Prosecution and imprisonment may apply in severe violations

14. Are there specific responsibilities for refurbishers?

Yes. Refurbishers must:

Register with SPCB, Odisha

Submit data on quantity refurbished

Ensure safe handling and storage

Send non-refurbishable e-waste to authorized recyclers only

15. Where can one find authorized e-waste handlers in Odisha?

You can visit:

https://ospcb.gov.in – SPCB, Odisha (list of authorized recyclers)

https://eprewastecpcb.in – CPCB EPR Portal for national registry

14.5 Municipal Solid Waste Management

1. **What law governs municipal solid waste management in Odisha?**

   Municipal Solid Waste is governed under the Solid Waste Management Rules, 2016, notified under the Environment (Protection) Act, 1986, applicable across India. In Odisha, implementation and compliance are monitored by:

   Urban Local Bodies (ULBs)

   State Pollution Control Board (SPCB), Odisha

   District Urban Development Agencies (DUDAs)

2. **Who is responsible for municipal solid waste management in cities and towns?**

   Urban Local Bodies (ULBs) such as municipalities and NACs (Notified Area Councils) are primary implementing authorities.

   They are responsible for the collection, segregation, transportation, processing, and disposal of municipal waste.

3. **What is the role of SPCB, Odisha in MSW management?**

   SPCB, Odisha is responsible for:

   Monitoring compliance with SWM Rules by ULBs and facility operators

   Granting authorization for composting, RDF, biomethanation, and landfills

   Reviewing Environmental Monitoring Reports

   Conducting site inspections and imposing environmental compensation for violations

4. **What are the segregation requirements for households and institutions?**

   All waste generators must segregate waste at source into:

   Biodegradable (e.g. food, garden waste)

   Non-biodegradable (e.g. plastics, metals)

   Domestic hazardous (e.g. sanitary waste, batteries)

   ULBs must promote segregation through awareness campaigns and locals by-laws.

5. **Is door-to-door waste collection mandatory?**

   Yes. All ULBs must implement 100% door-to-door collection of segregated waste through vehicles equipped with GPS and partitions for dry and wet waste.

6. **What are the processing requirements for municipal solid waste?**

   As per rules and SPCB directions, ULBs must ensure:

   Composting or biomethanation of biodegradable waste

Recycling or recovery of dry waste via material recovery facilities (MRFs)

Use of refuse-derived fuel (RDF) for energy recovery where applicable

Landfilling only inert and non-recyclable residues

7. What authorizations are required under the SWM Rules?

ULBs must obtain authorization from SPCB, Odisha for waste processing and disposal facilities

Authorizations are valid for 5 years and require compliance with environmental norms

Facilities must submit annual returns to SPCB

8. How is landfill management regulated in Odisha?

Landfills must:

Be scientifically designed with liners, leachate collection, and gas vents

Accept only non-biodegradable inert waste and process rejects

Conduct environmental monitoring (groundwater, leachate, air quality)

Be located away from flood plains, wetlands, and habitation zones (as per siting guidelines)

9. What are the rules regarding construction and demolition (C&D) waste?

Must be stored separately and sent to C&D waste recycling facilities

Not to be mixed with municipal waste

Builders and contractors are responsible for safe disposal/reuse

10. Are there specific duties for bulk waste generators (hotels, apartments, industrial townships etc.)?

Yes. Bulk generators must:

Segregate and process biodegradable waste on-site (e.g., composting)

Handover dry waste to authorized recyclers

Not rely solely on ULBs for waste collection

11. What are the monitoring requirements for ULBs and facility operators?

They must:

Conduct quarterly environmental monitoring at processing/landfill sites

Submit annual reports to SPCB, Odisha (by June 30 every year)

Maintain records of quantity collected, processed, and disposed

12. Are there any incentives or support offered for decentralized waste management?

Yes. ULBs are encouraged to support:

Community composting

Home composting incentives

Material recovery centres run by Self Help Groups (SHGs) or NGOs

Projects under Swachh Bharat Mission

13. What are the public participation requirements?

ULBs must ensure:

Citizen awareness campaigns

Grievance redressal systems for waste issues

Public display of waste management performance indicators

14. Where can I get more information on MSW management or file an application?

SPCB, Odisha website: https://ospcboard.org

Swachh Bharat Mission (Urban): https://swachhbharaturban.gov.in

14.6 Construction & Demolition Waste

1. **What are Construction and Demolition (C&D) Waste Management Rules?**

   These rules, notified by the Ministry of Environment, Forest and Climate Change (MoEF&CC) in 2016 to regulate the disposal and recycling of construction debris, concrete, bricks, tiles, soil, and demolition waste. The State Pollution Control Board (SPCB), Odisha oversees enforcement in the state.

2. **Who is responsible for managing C&D waste?**

   Responsibility lies with:

   - Waste generators (contractors, builders, individuals)
   - Urban Local Bodies (ULBs)
   - Project proponents of large infrastructure or demolition works
   - Processing facility operators
   - Service provider

3. **What is considered as C&D waste?**

   C&D waste includes:

   - Debris, bricks, concrete, soil, stones
   - Plaster, wood, metal, tiles, and glass from construction and demolition
   - Excavated earth not reused at site
   - Discarded electrical, plumbing, or sanitary fixtures

4. **Do generators need to segregate C&D waste?**

   Yes. Segregation at source is mandatory and should be done into categories like:

   - Concrete
   - Steel and metals
   - Wood, plastic, and other reusable items
   - Soil/sand/mortar

   This helps facilitate recycling, and reduces landfill burden .

5. **Are there legal obligations for construction companies and builders?**

   Yes. Builder must:

   - Segregate and store C&D waste at site
   - Transport waste to approved processing or collection centers
   - Submit waste management plans to ULB/SPCB for projects ≥20,000 sq. m
   - Reuse materials (e.g., recycled aggregates) wherever feasible

6. **Do builders need approval from SPCB, Odisha for C&D waste management?**

Not directly, however:

Projects >20,000 sq.m need Environmental Clearance, which includes a C&D waste plan

SPCB, Odisha evaluates compliance through Consent to Establish/Operate

ULBs and facility operators need SPCB authorization for C&D waste processing facilities

7. **What are the roles of Urban Local Bodies (ULBs)?**

ULBs must:

Designate collection points for C&D waste

Authorize transporters and recyclers

Set up or facilitate processing facilities (with private sector/PPP)

Monitor illegal dumping and impose fines under by-laws

8. **Where should C&D waste be disposed of?**

It should be:

Sent to authorized C&D waste processing plants

Reused at site for filling, leveling, or backfilling

NOT dumped in water bodies, drains, open spaces, or on roads

9. **What processing or recycling options exist for C&D waste?**

Approved options include:

Crushing and screening for use as sub-base material or in roads

Recycling concrete debris into pavers or bricks

Use of metal scrap in foundries

Wood recovery for furniture or biomass

10. **What are the rules for large infrastructure projects?**

Projects >20,000 m^2 or those requiring Environmental Clearance must:

Submit a C&D Waste Management Plan

Specify estimated quantities, disposal sites, and recycling strategy

Ensure at least 90% reuse or recycling of generated waste

Include the plan in their Environmental Management Report submitted to SPCB

11. Is reuse of C&D waste materials encouraged?

Yes. Government projects and ULBs are encouraged to:

Use recycled aggregates in roads, footpaths, non-structural construction

Include recycled content clauses in tender specifications

Promote awareness among builders, contractors and citizens

12. Are annual reports required for C&D waste handling?

Yes.

ULBs and processing facility operators must submit annual reports to SPCB, Odisha by 30th June each year

The report must include quantities generated, processed, disposed, and reused

13. Where can more information be found?

SPCB, Odisha website: https://ospcboard.org

MoEF&CC website: https://moef.gov.in

CPCB website: https://cpcb.nic.in

15. Environmental Governance of Specific Sector Industries

Brick Kilns

Country Liquor

DG Sets

Hotel

Hot Mix Plants

Poultry Farms

Rice Mills

Stone Crushers

15.1 Brick Kilns

1. **Are brick kilns required to obtain consent from SPCB, Odisha?**

   Yes. Brick kilns must obtain Consent to Establish (CTE) before setup and Consent to Operate (CTO) before starting operations under the Air and Water Acts from the SPCB, Odisha.

2. **What are the siting criteria for establishing a brick kiln in Odisha?**

   Yes. As per SPCB norms:

   Minimum 1 km from residential areas, schools, and hospitals

   At least 500 meters from national/state highways

   Should not be located within 1 km of any reserved forest, wildlife sanctuary, or eco-sensitive area

   Additional restrictions may apply depending on local conditions.

3. **Is Environmental Clearance (EC) required for brick kilns?**

   No. Brick kilns do not require prior Environmental Clearance (EC). However, brick earth extraction requires EC as per EIA Notification, 2006 (As amended).

4. **What type of fuel is permitted in brick kilns as per SPCB, Odisha?**

   Use of cleaner fuels is encouraged. Coal, biomass, and agriculture waste are permitted with efficiency norms. Use of hazardous waste, plastic, or rubber as fuel is strictly prohibited.

5. **What are the environmental pollution control measures are required for brick kilns?**

   Mandatory measures include:

   Use of zig-zag technology or vertical shaft kilns (for improved combustion and reduced emissions)

   Construction of settling tanks and ash pits for waste containment

   Water spraying on roads to supress dust

   Green belt plantation around the kiln site

   Proper stack/chimney height (minimum 30 meters) for emission dispersion

6. **Is conversion to zig-zag technology mandatory?**

   Yes. As per recent guidelines, traditional Fixed Chimney Bull's Trench Kilns (FCBTKs) are being phased out. All kilns must convert to zig-zag technology for better energy efficiency and lower particulate emissions.

7. **What are the monitoring requirements for brick kilns?**

   Operators must monitor:

   Stack emissions (for PM_{10}, $PM_{2.5}$)

   Ambient air quality (quarterly, if required)

   Fuel consumption and ash generation

   Reports may be submitted periodically to SPCB.

8. Can fly ash be used in brick making?

Yes. Use of fly ash in bricks is encouraged under Fly Ash Notification, 2022 by MoEF&CC. Kilns within 300 km of a thermal power plant must use fly ash in brick production as per prescribed norms.

9. What are the consequences of non-compliance with SPCB, Odisha norms?

Non-compliance can result in:

Closure notices or suspension of CTO

Fines or penalties

Environmental compensation under the Polluter Pays Principle

Repeated violations can lead to legal action under the Environment (Protection) Act, 1986.

10. Are old kilns allowed to operate without upgrading their technology?

No. SPCB, Odisha mandates conversion to cleaner technologies such as zig-zag or VSBK. Non-upgraded kilns will not be granted CTO or renewal of consent.

11. Is water management also a part of environmental compliance?

Yes. Brick kilns must ensure:

Avoid contamination of nearby water bodies

Reuse of water from processes

Provision of rainwater harvesting (recommended) facilities

12. Can brick kilns be located in clusters?

Yes, but each kiln in a cluster must individually comply with environmental norms. SPCB approval is required and the regional pollution load limits must not be exceed .

13. How can a brick kiln apply for consent or EC?

Applications can be submitted online via the Odisha State Single Window Portal (GO SWIFT) / or SPCB online portal www.odocmms.nic.in. Required documents include

Layout plan of the unit

Land detail including lease deed,

RoR etc.

Technology details

Fuel use plan

EMP

NOC from local authorities

EIN from DIC

Siting criteria (NOC) from Collector-cum-DM

15.2 Country Liquor

1. **Are country liquor plants required to obtain environmental approvals?**

   Yes. All country liquor plants must obtain:

   Consent to Establish (CTE)/

   Environmental Clearance (EC) before setting up the unit

   Consent to Operate (CTO) before starting production

   These are mandatory under the Air (Prevention and Control of Pollution) Act, 1981 and Water (Prevention and Control of Pollution) Act, 1974.

2. **What are the pollution potential of country liquor plants?**

   These plants typically cause:

   Water pollution from spent wash and process effluents

   Air pollution from fuel combustion (e.g., rice husk)

   Odour nuisance from fermentation and waste handling

   Solid waste generation from fermentation residues and husk / wood ash

3. **What are the pollution control requirements for such plants?**

   They must install and maintain:

   Effluent Treatment Plants (ETPs) or Zero Liquid Discharge (ZLD) systems

   Stack / chimney attached to the Bhatti to control air pollution

   Adequate odour control and housekeeping measures

   Proper storage and disposal systems for solid waste

4. **Can untreated effluent be discharged into drains or land?**

   No. Discharge of untreated or partially treated effluent is strictly prohibited. Treated effluent, if any, must meet SPCB discharge standards and may only be used for irrigation or land discharge.

5. **Is Zero Liquid Discharge (ZLD) mandatory?**

   Not mandatory, it depends upon the location of the unit. It is either mandatory or strongly recommended, especially if located in sensitive or water-scarce zones.

6. **What is the typical effluent treatment method used in ETP?**

   Common treatment components include:

   Screening

   Oil and grease tapping

   Equalisation

   UASB reactor

   Biological treatment (Aeration)

   Clarification

Sludge drying

Sludge recirculation, filtration and disinfection

7. How should solid waste (e.g., fermentation sludge, ash) be handled?

Fermentation sludge may be used as cattle feed

Ash may be used by brick kilns, cement plants, or for soil conditioning

Ensure waste is stored in impervious containers or pits

No open dumping is permitted

8. Is stack monitoring required?

Not mandatory. No provision has been stipulated as these are very small units.

9. Are flow meters and online monitoring systems mandatory?

Not mandatory. No provision has been stipulated as these are very small units.

10. How often should the Consents be renewed?

Consent to Operate is valid for up to 5 years
Must be renewed before expiry through the SPCB Odisha online portal

11. Can liquor plants be located near water bodies or villages?

Location must comply with:
Safe distance from residential areas, water bodies, and schools
SPCB Odisha may reject applications if siting is inappropriate

12. What documents are needed for CTO application?

EC copy
Project report and layout
Land document
ETP design and pollution control plans
Water and power requirement
CTO Fees as per the fee structure of the Board.

13. Are periodic compliance reports required?

Yes. Liquor plants must submit:

Monthly or quarterly reports on effluent and emissions (as directed)

Annual Environmental Statement (Form V)

14. Where can I find more details or apply online?

Visit:

https://ospcboard.org / https://odocmms.nic.in – SPCB, Odisha official portal

Contact: Regional offices of SPCB Odisha for location-specific requirements and inspections

15.3 DG Sets

1. **Are DG sets regulated under environmental laws in India?**

   Yes. DG sets are regulated under:

   Environment (Protection) Act, 1986

   Air (Prevention & Control of Pollution) Act, 1981

   CPCB emission and noise standards

   State-specific guidelines issued by SPCB, Odisha

2. **Do I need permission from SPCB, Odisha to install a DG set?**

   Yes, depending on capacity:

   DG sets ≥800 kW/1000 kVA, prior Consent to Establish (CTE) and Consent to Operate (CTO) under Air (PCP) Act, 1981 are mandatory.

   DG sets <1000 kVA, are exempted from consent requirement, but must comply with CPCB emission and noise norms.

3. **What are the noise standards for DG sets?**

   Noise shall not exceed 75 dB(A) at 1 meter distance in open field conditions.

   All DG sets must installed acoustic enclosures or soundproof housing are mandatory.

   Anti-vibration mounting pads & proper exhaust muffler must be installed.

4. **Are there any restrictions on usage of older DG sets?**

   Yes. As per Hon'ble NGT directions and CPCB guidelines:

   Use of older DG sets (non-CPCB compliant) is banned or restricted in polluted areas or where grid power is available.

   SPCB, Odisha may issue local restrictions in non-attainment cities or critical areas.

   The engines/generating sets manufactured and installed before 1.7.2004 or the engines which are not complying either Stage-1 and/or Stage-II emission limits, such engines are to be scrapped.

5. **What are the fuel requirements under the new CPCB-IV+ norms?**

   Only low-sulphur diesel shall be used. In addition:

   Use of alternative fuels like bio-diesel blends is encouraged.

   Fuel consumption monitoring is mandated in some sectors.

   The DG Set owner shall strictly comply with the Fuel Policy of the State Govt. of Odisha.

6. Can DG sets be used in residential or commercial buildings?

Yes, subject to:

Compliance noise and emission norms.

Shall not create public nuisance to nearby residential areas.

Approval or acknowledgment from local authorities/SPCB if applicable.

7. Are DG set users required to monitor emissions?

For large generators (≥1000 kVA), stack monitoring for NOx, PM, and CO is required.

Remote emission monitoring is recommended in new engines.

Regular maintenance logs and stack height compliance are mandatory.

8. What is the required stack height for DG sets?

Stack height (capacity <800 kW):

$H = h + 0.2 \times \sqrt{KVA}$

where h is building height in meters, KVA = Capacity of DG set.

Stack height (capacity >800 kW): Maximum of the following

$H = 14Q^{0.3}$

where Q is the total SO_2 emission from the plant in kg/hr.

minimum 6m above the building where DG set is installed

30m from ground level

9. How can I retrofit the old DG sets?

CPCB has notified the "System and Procedure for emission compliance testing of Retrofit Emission Control Device (RECD) for DG sets upto 800 kW" on 01.02.2022.

Accordingly DG sets operating in the State, having a capacity of 50 KVA shall abide the followings:

a) DG sets manufactured and installed before 01.07.2004 or DG sets not complying to either Stage-I and/or Stage-II emission limit are to be scrapped.

b) No one sell / use / run the above DG sets.

c) DG sets manufactured / imported between 01.07.2004 to 01.07.2014 and complying to Stage-I emission limit shall comply 70% reduction in Particulate Matter (PM) by using RECD.

d) DG sets manufactured / imported after 01.07.2014 and complying to Stage-II emission norm shall install RECD by reducing PM with 70%.

10. What steps should I take before installing a DG set in Odisha?

1. Check category and capacity
2. Apply for CTE from SPCB (if applicable)
3. Ensure CPCB-IV+ compliant engine (for new sets)
4. Install acoustic enclosure and stack
5. Get CTO from SPCB, Odisha before operation

15.4 Hotel

1. **Is it mandatory for hotels in Odisha to obtain Consent to Establish (CTE) and Consent to Operate (CTO) from SPCB?**

   Yes. All hotels, regardless of size, must obtain CTE before construction and CTO before operation from the State Pollution Control Board, Odisha under the Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981.

2. **Are hotels required to treat kitchen and laundry wastewater separately?**

   Yes. Effluent from kitchens must be pre-treated using grease traps before entering the STP and should meet the discharge norms.

   The laundry wastewater must be treated through ETP of adequate capacity. The treated wastewater may be used in cooling of centralised air conditioner, Boilers, etc.

3. **What are the solid waste management obligations for hotels?**

   Hotels must comply with the Solid Waste Management Rules, 2016, including:

   Segregating waste at source (biodegradable, non-biodegradable, and hazardous).

   Composting organic waste onsite (if space permits).

   Handing over non-biodegradable waste to authorized recyclers.

4. **Are hotels required to manage plastic waste?**

   Yes. As per Plastic Waste Management Rules, 2016 (amended 2021):

   Use of Single Use Plastic (SUP) items is banned.

   Hotels must avoid plastic packaging and provide alternatives (e.g., cloth bags, paper packaging).

   Generated plastic waste, must be handed over to authorized plastic waste recyclers.

   Hotel must minimize use of disposable plastic in its premises and ensure proper disposal through recyclers registered with SPCB.

5. **Are hotels subject to environmental audits or inspections?**

   Yes. Periodic inspections and audits by the SPCB are mandatory. Hotels must maintain proper records of waste generation, treatment, and disposal.

6. **Do hotels need to monitor and report environmental parameters?**

   Hotels may be required to submit reports on:

   STP performance (BOD, COD, TSS).

   Water and energy consumption.

   Solid waste and hazardous waste management.

   As part of annual returns to the SPCB.

7. Is rainwater harvesting mandatory for hotels?

Yes. All hotels must install rain water harvesting systems as per local authorities norms. Large hotels should have both roof-top and ground recharge system.

8. Can hotels use treated wastewater?

Yes. Treated effluent from the STP can be reused for gardening, flushing, and cooling provided it meets CPCB effluent reuse standards.

9. What are the noise pollution norms for hotels?

Hotels must follow the Noise Pollution (Regulation and Control) Rules, 2000. Diesel generator sets must have acoustic enclosures and meet prescribed decibel levels.

DJ Set, if used should be operated within the premises till 10 PM only. No loudspeakers and bands are permitted beyond 10 PM.

10. Do hotels need to comply with E-Waste Management Rules?

Yes. All electronic waste (e.g., computers, air conditioners, batteries) must be disposed of through authorized e-waste handlers as per E-Waste Management Rules, 2016.

11. When Hotel unit require obtaining Environmental Clearance (EC) as per EIA Notification, 2006 and amendment thereafter?

Hotel are required to obtain EC under the EIA Notification, 2006, if total built up area is 20,000m^2 or more.

12. Is an Environment Management Plan (EMP) mandatory?

Yes, especially for hotels requiring EC. An EMP must address water, energy, waste, noise, and air pollution management and include monitoring mechanisms.

13. Are green building certifications like GRIHA/LEED mandatory for hotels?

Not mandatory but strongly encouraged. Green certifications such as GRIHA/LEED demonstrate environmental commitment to sustainability and may help environmental clearance processes.

14. How can a hotel apply for CTE/CTO in Odisha?

Hotels must apply online via the SPCB, Odisha online application portal www.odocmms.nic.in with detailed documents like project report, layout, STP design, waste management plan, etc.

15.5 Hot Mix Plants

1. **What permissions are required to operate a hot mix plant in Odisha?**

   All hot mix plants must obtain:

   Consent to Establish (CTE) before installation

   Consent to Operate (CTO) before commencing operation.

   These are mandated under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974, and are issued by SPCB, Odisha.

2. **Are there any siting criteria for hot mix plants in Odisha?**

   Yes, as per MoEF&CC, Govt. of India notification dated 18.05.2023 under EP (Act) Second Amendment Rules, 2023, Hot mix plant must be located at minimum distance of:

   1 km from boundary of cities and towns

   0.5 km from habitation

   0.2 km from National and State Highways (from centre line)

   0.5 km from schools or colleges and temples

   1 km from hospital, court and tourist sports

3. **Is Environmental Clearance (EC) required for hot mix plants?**

   No. EC is not required for installing a Hot Mix Plant. However, SPCB may seek a basic Environmental Management Plan (EMP) for certain installations.

4. **What kind of pollution taken place due to operation of hot mix plant?**

   Hot mix plants are mostly air polluting units.

5. **What pollution control measures are mandatory for hot mix plants?**

   Essential measures include:

   Drum type: cyclone or multi cyclone with wet scrubber

   Batch type: multi cyclone with bag filter

   Green belt shall be developed along the periphery of plant

   Paved approach roads, working platform with regular water sprinkling arrangement

   Provision of stack/chimney with appropriate height for dispersion of emissions from air pollution control device

   In case of existing hot mix plant prior to 18.5.2023, a 6m high compound wall of GI sheets around the periphery of plant shall be made.

6. What are the air quality monitoring requirements?

Hot mix plants must monitor:

Stack emissions (especially PM, SO_2, NOx)

Ambient air quality (PM_{10}, $PM_{2.5}$ etc.) at least once every 6 months or as directed by SPCB Monitoring reports must be maintained and submitted during inspections or renewal of Consent to Operate.

7. Can hot mix plants be set up temporarily for highway projects?

Yes, temporary/mobile hot mix plants can be permitted by SPCB, Odisha if:

Located in accordance with siting criteria

Operated with full pollution control equipment

Dismantled responsibly after project completion and restore the site.

8. What kind of fuel is allowed in hot mix plants?

Permitted fuels include:

Diesel

Furnace oil (FO)

Light diesel oil (LDO)

Use of hazardous, plastic, or waste fuels is strictly prohibited.

9. Is water pollution a concern in hot mix plants?

Hot mix plants are generally dry processes, but if water is used for dust suppression or cleaning, care must be taken to avoid runoff into natural water bodies. Settling tanks or reuse systems are recommended. In case of wet scrubber, the scrubbed water shall be recycled.

10. How can a hot mix plant apply for consent online in Odisha?

Applications must be submitted through the portal www.odocmms.nic.in. Required documents include:

Project report having project cost certified by CA

Layout plan

Fuel use details

Pollution control measures proposal

Proof of land/lease and local body NOC (if applicable)

Undertaking on siting norms

Vicinity map

11. Is green belt development required around hot mix plants?

Yes. Operators must develop a green belt around the site perimeter to help mitigate dust and noise. Native species are preferred.

12. Are inspections conducted by SPCB, Odisha?

Yes. SPCB conducts regular and surprise inspections to ensure compliance with consent conditions, air quality norms and pollution control measures.

13. Is noise pollution from hot mix plants regulated?

Yes. Plants must ensure:

Noise levels remain within 75 dB(A) during daytime and 70 dB(A) at night in industrial areas

Acoustic enclosures of DG sets and proper equipment maintenance should be ensured to minimize noise

14. Can hot mix plants be part of a cluster or co-located with stone crushers?

Yes, but each unit must individually comply with SPCB norms, and combined pollution load should remain within permissible limits. Cluster siting may require a comprehensive EMP.

15.6 Poultry Farms

1. **Do poultry farms require permission from SPCB, Odisha?**

   Yes. All poultry farms must obtain:

   Consent to Establish (CTE) before setup

   Consent to Operate (CTO) before commencing operation

   These are mandatory under the Water (Prevention and Control of Pollution) Act, 1974 and Air Act, 1981.

2. **Which Poultry Farms are required to obtain Consent to Establish and Consent to Operate from the State Pollution Control Board, Odisha?**

   The Poultry Farms having capacity of more than 25,000 are required to obtain CTE / CTO from the State Pollution Control Board.

   So far as the Poultry Farms having capacity between 5,000-25,000 birds is concerned, mentioning in the CPCB Guidelines in Clause 8 (4), the same has been stayed by the Hon'ble Apex Court vide their order dtd. 28.04.2023 in the matter of Civil Appeal No. 2480/2023 – The Poultry Farms and Breeders Association vs. Union of India & Ors., and the same is pending for hearing before the Hon'ble Apex Court.

3. **What is the categorization of poultry farms?**

   Central Pollution Control Board has categorized poultry farms under Green Category.

4. **What are the major environmental concerns from poultry farms?**

   Air pollution: foul odour, ammonia, dust from feed

   Water pollution: runoff from droppings, litter, and wash water

   Solid waste: poultry litter, dead birds, feathers

   Flies, pests and rodents nuisance

   Odour pollution

5. **What are the siting norms for poultry farms in Odisha?**

   As per CPCB/SPCB guidelines, poultry farms the recommended minimum distance must be:

   ≥500 m from major residential areas

   ≥100 m from water bodies (River, Lakes, canals, wells, storage tanks)

   ≥100 m from NH and ≥50 m from SH

   10 to 15 m from rural roads / internal roads / village pagdandis

   Poultry shed should be ≥10 m from farm boundary

6. **How should poultry litter and manure be managed?**
   - Proper ventilation
   - Store litter in covered sheds with impermeable flooring
   - Composting or Biogass method for disposal
   - Compost or dry before disposal or sale
   - Avoid open dumping or runoff into drains
   - Do not burn poultry litter

7. **How should dead birds be disposed of?**

   Acceptable disposal methods include:
   - Deep burial pits (lined and covered with lime and soil)
   - Composting in covered bio-digesters
   - Incineration (for larger farms with appropriate units)
   - Open dumping of carcasses is strictly prohibited.

8. **Are there guidelines for managing wastewater?**

   Yes. Farms must:
   - Ensure zero discharge into nearby drains or water bodies
   - Use soak pits or lined lagoons to manage wash water
   - Reuse treated water for farm use or irrigation, if safe
   - Never discharge of water used in cleaning directly into the environment

9. **What odour control measures should be taken?**
   - Regular removal of droppings and wet litter
   - Use bio-enzymes or EM (Effective Microorganisms)
   - Maintain ventilation and airflow
   - Develop a green belt around the farm

10. **What are the record-keeping requirements for poultry farms?**

    Farms (especially medium and large) should maintain:
    - Daily records of bird count, litter generation, water usage
    - Disposal logs for waste and carcasses
    - CTO/CTE documents
    - Complaint resolution records, if applicable

11. **Are inspections conducted by SPCB, Odisha?**

    Yes. SPCB may conduct:
    - Pre-approval inspections

Periodic monitoring for compliance

Surprise visits in case of complaints or violations

12. How often should Consent to Operate be renewed?

CTO is generally valid for up to 5 years

Renewal must be applied through the SPCB portal before expiry

13. Are biosecurity and environmental norms interlinked?

Yes. Proper biosecurity measures (disinfection, restricted entry, etc.) reduce the risk of disease and environmental contamination, and are encouraged under SPCB norms.

14. What penalties apply for non-compliance?

SPCB, Odisha may:

Issue closure notices or revoke consents

Impose environmental compensation

Initiate legal proceedings under the Environment Protection Act

15. Can poultry litter be used as fertilizer or sold?

Yes, but only after:

Composting or drying to prevent leaching and odor

Complying with fertilizer quality standards

Ensuring no contamination of water bodies

16. Where can I apply or get more information?

Visit: https://ospcboard.org

Contact regional SPCB offices or local District Veterinary/Animal Husbandry Offices for support

15.7 Rice Mills

1. **Are rice mills required to obtain consent from SPCB, Odisha?**

   Yes. All rice mills shall obtain:

   Consent to Establish (CTE) before setting up, and

   Consent to Operate (CTO) before starting operations. These are mandatory under the Air (PCP) Act, 1981 and Water (PCP) Act, 1974.

2. **What is the process of applying for Consent to Establish (CTE) / Consent to Operate (CTO)?**

   Rice mills shall apply for CTE/CTO online through:

   SPCB, Odisha Portal – https://ospcboard.org

   Required documents include:

   CTE / CTO fees

   Project details (capacity, location)

   Land ownership/lease documents

   Layout plans

   Details of air and water pollution control measures

3. **What types of pollution are basically generated by rice mills?**

   Rice mills can cause:

   Air pollution: from husk-fired boilers, parboiling, dust from handling of raw material, husk and boiler ash

   Water pollution: from soaking, washing and parboiling operations

   Noise pollution: from machinery, blowers, and milling units

   Solid waste: husk, boiler ash, and ETP sludge

4. **What air pollution control measures are mandatory for rice mills?**

   Installation of cyclone separators, bag filters, or wet scrubbers for husk-fired boilers

   Proper stack/chimney with prescribed height as per SPCB norms

   Dust suppression measures in processing and bagging areas

5. **How can rice mills manage wastewater from parboiling units?**

   Installing Effluent Treatment Plants (ETPs) for treating wastewater

   Reuse treated water for cooling or gardening wherever feasible

   Ensure no discharge of process waste water into drains or water bodies without treatment

   Regular effluent monitoring and report submission to SPCB

6. Are small rice mills exempt from pollution control approvals?

No. All rice mills, including small and medium ones, require CTE and CTO. However, pollution control requirements may be relaxed based on scale and type of operation (raw/parboiled).

7. Is installation of flow meters and online monitoring mandatory?

For large/medium mills:

Flow meters on water intake and effluent discharge points are mandatory

Online Continuous Emission Monitoring Systems (OCEMS) may be required for larger boilers (as per SPCB direction)

8. What are the norms for boiler ash and husk disposal?

Ash from husk-fired boilers should be stored in covered pits/silos

Can be given to brick kilns or farmers for reuse

No open dumping or burning of husk is permitted

9. How frequently should mills renew their Consent to Operate?

Consent to Operate (CTO) can be granted for a maximum period of 5 years

Mills shall apply for renewal before expiry through the SPCB portal

Operating without CTO may lead to closure notice or fines

10. When the rice mills are inspected by SPCB, Odisha?

SPCB officials conduct:

Pre-establishment inspection

Surprise inspections for compliance

Monitoring of stack emissions, effluents, and housekeeping

11. What are the environmental responsibilities of rice mill owners?

They must:

Maintain all pollution control equipment in working condition

Maintain logbooks of operations of pollution control measures and quantity of waste handled.

Ensure safe storage and disposal of husk, ash, and ETP sludge

Comply with SPCB directions and submit environmental statements (Form V) if applicable

12. Can untreated wastewater be used for irrigation?

No. Untreated wastewater is not allowed for any purpose. Only treated effluent meeting SPCB norms can be reused for non-potable applications like irrigation or cooling.

13. How can rice mills contribute to sustainable practices?

Adopting energy-efficient technologies

Recovering heat from boiler flue gases

Using treated wastewater for gardening

Selling husk and ash for value-added uses

14. Where can I find help with compliance and regulation?

SPCB, Odisha official website: https://ospcboard.org

District Industries Centre and Regional SPCB Offices

15.8 Stone Crushers

1. **What are the environmental regulations applicable to stone crushers in Odisha?**

   Stone crushers must comply with the State Pollution Control Board (SPCB) guidelines under the Air (Prevention and Control of Pollution) Act, 1981, and the Water (Prevention and Control of Pollution) Act, 1974. They also need to follow the Environmental Clearance (EC) requirements under the EIA Notification, 2006, as amended.

2. **Is Consent to Establish (CTE) and Consent to Operate (CTO) mandatory for stone crushers?**

   Yes. Every stone crusher must obtain CTE before setup and CTO before commencing operations from SPCB, Odisha under the Air and Water Acts.

3. **What is the procedure to obtain CTE/CTO from SPCB, Odisha?**

   Applicants must apply online through Portal www.odocmms.nic.in with required documents such as land details, layout plan, pollution control measures, and environmental management plan (EMP). Scrutiny and field verification are conducted by SPCB officials.

4. **What are the distance criteria for setting up a stone crusher?**

   As per SPCB, Odisha guidelines, stone crushers should be located:

   At least 500 meters from human habitation or educational institutions, hospitals, courts or public offices

   200 meters from national or state highways

   1 km from the municipality / NAC area as notified by Govt. of Odisha

   Away from reserved forests or eco-sensitive zones (distance varies case-wise)

5. **What pollution control measures are mandatory?**

   Stone crushers must install:

   Dust containment cum suppression system for the equipment

   Construction of wind breaking walls

   Construction of metaled roads within the premises

   Regular cleaning and wetting of the ground within the premises

   Development of green belt around the periphery

6. **How often should air quality be monitored?**

   Ambient air quality must be monitored at regular intervals (once in two years as directed by SPCB) and the data submitted to the Board. Key parameters include PM_{10}, $PM_{2.5}$, SO_2 and NOx.

7. Is there a requirement for a green belt or plantation?

Yes. A green belt with suitable tree species must be developed around the boundary of the unit, and along internal roads to act as a dust and noise barrier.

8. What is an Environmental Management Plan (EMP), and is it required?

EMP is a site-specific plan detailing measures to minimize environmental impacts. It is mandatory for new or expanding stone crushers and must be submitted along with CTE applications.

9. Can existing stone crushers be regularized if they were set up without permissions?

Regularization may be allowed if the unit meets the siting and environmental criteria and submits an application with remedial measures. However, this is subject to SPCB's discretion and legal provisions.

10. Are periodic inspections conducted by SPCB, Odisha?

Yes. SPCB officials carry out scheduled and surprise inspections to ensure compliance with pollution control norms and permit conditions.

11. How can we ensure continuous compliance?

Maintain records of dust suppression and water usage

Regular maintenance of pollution control equipment

Monitor air quality

Train staff on environmental practices

Submit compliance reports on time to SPCB

12. Is environmental clearance required for setting up a stone crusher?

No. Environmental Clearance is not required for setting up of a stone crusher. However, EC is required for stone quarry under Category B from State Environment Impact Assessment Authority (SEIAA).

16. Monitoring Programs

Air Quality

Water Quality

Soil & Hazardous Waste

Coastal Monitoring

16.1 Air & Noise Quality Monitoring Program

1. **What is ambient air?**

   Ambient air refers to the air surrounding us, specifically the outdoor air or atmospheric air in its natural, uncontaminated state.

2. **What is the composition of natural ambient air?**

   Ambient air typically composed of about 78% nitrogen, 21% oxygen, and 1% other gases such as carbon dioxide, helium, methane, argon and hydrogen.

3. **What is air pollution?**

   Air pollution refers to the contamination of the atmosphere with harmful substances that can negatively impact human health, ecosystems and climate.

4. **What is air Pollutant?**

   Air pollutants are harmful gases, particles, or chemicals released in to the air from natural or anthropogenic (human made) sources.

5. **What are the sources of air pollution?**
   - **Natural sources like Volcanic eruption, Pollen from flower, Soil erosion due to wind blow**
   - Anthropogenic (Manmade) activities like industrial emissions, vehicle exhausts, burning of fossil fuels and construction and demolition activities.

6. **What are the types of air pollutants?**

   Two types of air pollutants i.e.- Primary air pollutants & Secondary air Pollutants.

7. **What is Primary air Pollutant?**

   Primary Pollutants are:

   - Pollutants that are emitted directly from sources into the atmosphere.
   - Examples: Carbon monoxide (CO), particulate matter (PM), nitrogen oxides (NOx), sulfur dioxide (SO_2) and hydrocarbons.
   - Sources: These can be from human activities (e.g. burning fossil fuels, industrial processes) or natural processes (e.g. volcanic eruptions, forest fires).

8. **What is Secondary air Pollutant?**

   Secondary Pollutants are:

   - Pollutants formed in the atmosphere through chemical reactions between primary pollutants, natural gases and sunlight.
   - Examples: Ozone (O_3), photochemical smog, and acid rain.
   - Formation: Primary pollutants like nitrogen oxides (NOx) and volatile organic compounds (VOCs) react in the presence of sunlight and other atmospheric conditions to form ozone.

9. Define Air Act, when it was enacted?

The Air (Prevention and Control of Pollution) Act, 1981 aims to prevent, control, and abate air pollution in India. It was enacted by the Parliament of India on March 29, 1981.

10. What is the aim of the Air Act?

To empowers the pollution control Boards to plan pollution prevention programs and to advise the State Government on related matters.

11. When was the latest ambient air quality standard notified and how many parameters are covered under this standard?

Ambient air quality standard notified in 2009, includes 12 nos of parameters such as SO_2, NO_2, NH_3, O_3, PM_{10}, $PM_{2.5}$, Benzene, Lead, CO, BaP, Arsenic & Nickel

12. What is 24 hourly average standard of the Parameters according to the 2009 Ambient air Quality Standard?

As per National Ambient Air Quality Standard (NAAQS) 2009, the permissible limits for key pollutants are as follows:

- For 24-hour average – So_2 and No_2: 80 $\mu g/m^3$ each, Nh_3: 400 $\mu g/m^3$, PM_{10}: 100 $\mu g/m^3$, $PM_{2.5}$: 60 $\mu g/m^3$, and Lead: 1.0 $\mu g/m^3$
- For annual average – Benzene: 5 ng/m^3, Benzon [a] pyreme (BaP): 1 ng/m^3, Arsenic: 6 ng/m^3, and Nickel: 20 ng/m^3
- For 1-hour average – Ozone (O_3): 180 $\mu g/m^3$ and Carbon Monoxide (CO): 4 mg/m^3

13. What is NAMP?

National Air Quality Monitoring Programme (NAMP) is a nation-wide programme for monitoring of ambient air quality. CPCB has established the NAMP, which presently comprises of 614 monitoring stations covering 257 cities in 29 States & 5 UTs in the entire country.

14. What are the major air pollutants monitored under NAMP?

Under NAMP four major pollutants viz. PM_{10} (Particulate Matter having an aerodynamic diameter less than or equal to 10 µm) $PM_{2.5}$ (Particulate Matter having an aerodynamic diameter less than or equal to 2.5 µm), Sulphur dioxide (SO_2) and Nitrogen dioxide (NO_2) have been identified for regular monitoring at all locations.

15. How many nos. of NAMP monitoring stations in Odisha?

Presently in the State of Odisha 59 nos. stations under National Ambient Air Quality Monitoring Programme (NAMP) are operating in 21 cities/towns by SPCB, Odisha.

16. What is the CPCB Guideline for NAMP sampling?

As per CPCB guidelines, ambient air quality monitoring should be conducted twice a week, totaling 104 observations annually. Sampling of gaseous pollutants such as SO_2 & NO_2 should be carried out over a 24 hour period using 4-hourly intervals. For particulate matter, PM_{10} should be sampled on an 8 hourly basic and $PM_{2.5}$ on 24 hourly basis.

17. What are the criteria for setting of AAQ monitoring station?

- The monitoring site should be free from all sides to ensure unobstructed airflow.
- The sampling instrument should be located at least 20 meters away from trees and at least twice the height of any nearby buildings or obstacles.
- The site should be away from direct pollution sources, such as chimneys, stacks, or traffic. For sampling instrument should be placed at least 3 meters above the ground level.

18. What are the instruments used for Air Monitoring?

Respirable Dust Sampler (RDS) is used for PM_{10} Sampling and Gaseous pollutant sampling, while a Fine Particulate sampler used for $PM_{2.5}$ monitoring.

19. What are the methods of analysis of different air parameters?

AAQ Parameters	Method of Analysis
SO_2	West-Gaeke Method
NO_2	Jacob Hochheiser modified method
NH_3	Indophenol Blue Method
O_3	Chemical Method
PM_{10}	Gravimetric Method
$PM_{2.5}$	Gravimetric Method
Heavy metals	Digestion followed by AAS method

20. Define Gaseous pollutants?

Gaseous pollutants are airborne substances in gases form that can adversely affect human health, the environment, and property. Common examples include sulfur dioxide (SO_2), nitrogen oxides (NOx), carbon monoxide (CO), and ozone (O_3).

21. Define Particulate pollutant?

These are tiny solid particles (PM_{10} & $PM_{2.5}$) or liquid droplets suspended in the air. They can possessions health risk by affecting the respiratory system and contributing to cardiovascular diseases.

22. What is AQI?

The Air Quality Index (AQI) is a single value that represents daily air quality in relation to its impacts on human health and the environmental impact. It transforms complex air quality data of various pollutants into a single number (index value).

23. What are the different categories of AQI?

The AQI is classified into six categories, namely Good, Satisfactory, Moderate, Poor, Very Poor, and Severe.

24. What is the impact of air pollution on health on the basis of AQI?

AQI Value	Category	Impact on Human Health
0-50	Good	Minimal impact
51-100	Satisfactory	Minor breathing discomfort to sensitive people
101-200	Moderate	Breathing discomfort to the people with lung, heart disease, children and adults
201-300	Poor	Breathing discomfort to people on prolonged exposure
301-400	Very poor	Respiratory illness to the people on prolonged exposure
>401	Severe	Respiratory effects even on healthy people

25. What is prominent pollutant?

A prominent pollutant is a substance present in the environment at concentrations high enough to cause adverse effects on human health, living organisms or the ecosystem.

26. What are the steps taken to check vehicular pollution?

The following measures have been undertaken:

- Establishment of Ambient Air Quality Monitoring network across India
- Notification of Ambient Air Quality Standards under Environment (Protection) Act.
- Notification of vehicular emission norms for year 1990-91, 1996, 1998, 2000, 2001
- Improving fuel quality by reducing diesel sulphur, reducing gasoline benzene & etc.
- Introduction of alternate fuelled vehicles like CNG/LPG and Electric vehicles.
- Improvement of public transport system.
- Phasing out 15 years old and grossly polluting commercial vehicles.
- Conducting public awareness campaigns and outreach programmes.

27. What is a Non-attainment city?

Non-attainment cities are those that consistently fail to meet National Ambient Air Quality Standards (NAAQS) for five or more consecutive years.

28. How many non-attainment cities in Odisha?

7 Non- attainment cities have been identified in Odisha. Those are Angul, Talcher, Bhubaneswar, Balasore, Cuttack, Kalinganagar and Rourkela.

29. What is the impact of air Pollution on human's health?

Air pollution significantly impacts human health, increasing the risk of respiratory diseases, cardiovascular disorders, and certain type of cancers. It can worsen existing conditions like asthma and COPD, leading to increased hospitalizations and even premature death. Long-term exposure can also contribute to neurological issues and reproductive problems.

30. What are the different measures to control air pollution?

Air pollution can be reduced only if there is a collective effort from everyone's side. There are 10 different ways given below that help in the control of air pollution.

1. Use of Public Transport
2. Use of solar panel for electricity instead of coal based electricity.
3. Avoid Burning of Plastics
4. Avoid Air Conditioners and Use Fans
5. Use Filters in Chimneys
6. Avoid Crackers and Fireworks encourage for green crackers instead of normal crackers.
7. Reduce the Use of Chemicals like body sprays, paints which pollute the air at a greater rate.
8. Planting more Trees
9. Repairing of roads
10. Using of scrubbers in road instead of Open dusting for cleaning

31. What initiatives should be taken by the Industries to mitigate air pollution?

Industries can reduce air pollution by adopting various initiatives, including cleaner technologies, switching to renewable energy sources, improving emissions control, and promoting sustainable operational practices. Key measures include reducing industrial emissions, improving vehicle emissions control, and conservation strategies across processes.

32. What is CEPI?

The Comprehensive Environmental Pollution Index (CEPI), is a numerical tool used to assess and characterize the overall environmental quality of a specific location by evaluating the combine impact of air, water and land pollution.

33. How is categorization done based on CEPI?

Industrial cluster with CEPI score of 70 and above were classified as Critically Polluted areas, while those with CEPI scores between 60 & 70 are categorized as severely polluted areas.

34. How many CEPI areas are there in Odisha?

In Odisha there are Five nos. of CEPI areas like Angul, Talcher, Paradeep, IB-valley Jharsuguda & Kalinganagar.

35. What is stack?

Stack or chimney, is a vertical structure used in industrial process to release gases, particulate matter, and other pollutants into the atmosphere, helping to disperse emissions at high altitudes and reduce ground level concentrations.

36. Define Stack monitoring?

Stack monitoring refers to the measuring and analyzing of emissions released from industrial stacks or chimneys to quantify pollutants levels. This process helps ensure

compliance with environmental regulations and help to design emission control equipments.

37. What are the parameters monitored in Stack monitoring by SPCB?

For Stack monitoring Parameters monitored by SPCB are PM, SO_2, NO_2, F^-, HCL etc.

38. Whether O_3 is good or bad for the Environment?

Ozone in the stratosphere is beneficial and in troposphere it is a harmful pollutant.

39. How O_3 is formed?

O_3 is formed by the interaction of sunlight, nitrogen oxides, and volatile organic compounds.

40. What is Global warming?

Global warming refers to the long term rise in the temperature of the planet due to the accumulation of certain gases in the atmosphere.

41. What are the gases responsible for Global Warming?

The green house gases are those that trap the solar energy reflected from the earth surface, contributing to global warming. The main gas that causes global warming is carbon dioxide, CO_2, although other gases also act as "warming gases", such as methane, CH_4, and nitrous oxide, N_2O.

42. What is Acid rain?

Acid rain refers to the rain water that has a pH level lower than that of rain, typically below 5.2, making it more acidic.

43. In the atmosphere which gases are responsible for acid rain and how the acid rain is formed?

Gases pollutants such as sulfur dioxide (SO_2) and nitrogen oxides (NO_X) when released into the atmosphere, react with water vapor, oxygen, and other chemicals to form sulfuric and nitric acids which lead to acid rain.

44. What is noise pollution?

Noise pollution refers to unwanted or excessive sound that can disrupt human and animal life potentially causing adverse health effects such as stress, hearing loss and slip disturbances.

45. When noise rule was enacted?

The Govt. of India has enacted Noise Pollution (Regulation and Control) Rules, 2000 vide S.O.123(E), dated 14th February, 2000.

46. What are the different types of zones under Noise Rule-2000?

Under this rule, the area are divided into four zones i.e.- Industrial, Commercial, Residential and Silence Zone.

47. What is Day Time & Night Time?

As per Noise Rule-2000, the Day Time is from 6 a.m to 10 p.m and Night Time is from 10 p.m to 6 a.m.

48. What are the Noise Standard of different Zones under Noise Rule-2000?

Noise Standards are for different zones are:

- Industrial Areas: 75 dB(A) Leq (daytime) and 70 dB(A) Leq (nighttime).
- Commercial Areas: 65 dB(A) Leq (daytime) and 55 dB(A) Leq (nighttime).
- Residential Areas: 55 dB(A) Leq (daytime) and 45 dB(A) Leq (nighttime).
- Silence Zones: 50 dB(A) Leq (daytime) and 40 dB(A) Leq (nighttime).

49. What is Silence Zone under Noise Rule?

A silence zone is defined as an area extending not less than 100 meters around hospital, educational institute, courts, religious places or any other area which is declared as such by the competent authority.

50. Who is the authority under Noise Rule?

Under the clause (c) of rule 2 of Noise Rule-2000 the State government do hereby designated District Magistrate, the Additional District Magistrate, the sub divisional Magistrate, the Superintendent of Police, the Additional Superintendent of Police, the Deputy Superintendent of Police and the Sub divisional Police officers of the respective district and sub division respectively as the Authority for maintenance of Ambient Air quality standard with respect to Noise.

51. What steps have been taken to control noise pollution due to loud speakers?

The Rule deals with specific provisions to control noise pollution caused by loud-speakers and public address system, as given below

Restriction on the use of loud speakers/public address system:

- Loud speakers or public address system shall not be used without prior written permission from the designated authority.
- Their use is prohibited during night time (between 10.00 p.m. to 6.00 a.m.) except in closed premises for communication such as auditoriums, conference rooms, community halls and banquet halls.

52. What steps have been taken by the Board on eve of Depawali festival?

Every year, the Board issues public notices in Odia and English newspapers on the harmful effect of fire crackers and promotes the use of green cracker. Ambient Air and Noise monitoring in conducted before, during and after Diwali to assess the impact, and the report is submitted to CPCB for the Hon'ble Supreme Court and shared with the Director-cum-Special Secretary, FE&CC, Department, Odisha.

53. Define Green crackers?

Green crackers are eco-friendly firework designed to emit less air and noise pollution compared to traditional crackers.

54. What is the role of Green crackers in air pollution?

Green crackers use less harmful chemicals and generates less ash and raw materials waste. While they significantly contribute less pollution by about 30% compared to traditional crackers, however they still emit some pollutants.

55. Is Air laboratory NABL accredited?

Yes. NABL accreditation certificate of the Air Laboratory along with the Scope of accreditation is available in Boards website (https://ospcboard.odisha.gov.in/divisions/central-laboratory/about-central-lab/).

56. Give the dissemination of Ambient air Quality data?

- On daily basis Ambient air quality data of monitored cities and towns of Odisha have been entered in EAQDES portal of CPCB
- Daily data of Bhubaneswar city is uploaded in SPCB web site as well as in two display board placed at Power house square and at Central laboratory.
- The monthly data is being submitted to CPCB and Hon'ble NGT, New Delhi.
- At the end of the year the status of air quality of the state has submitted before Addl. Chief Secretary F & E and CC, Principal Secretary H & UD, Commissioner STA, Collector of concerned district and Executive officer of concerned area to take remedial action to curb air pollution problem under their jurisdiction.

57. What type of testing services available in air lab?

Air laboratory offers sampling and analysis of Ambient air with respect to parameters like (PM_{10}, $PM_{2.5}$, SO_2, NO_2, NH_3, CO, Pb and Ni), Source emission with respect to parameters like(PM, SO_2, NO_2, CO_2, O_2, F^- and HCL) and Ambient Noise of the outside sample on payment basis

16.2 Water Quality Monitoring Program

1. **Why water quality is important?**

   Preserving the quality of freshwater is essential to prevent harm to human health, aquatic ecosystems and other beneficial uses.

2. **What is water quality?**

   Water quality is expressed in termes of different physical, chemical and biological characteristics with respect to its suitability for a particular use.

3. **What is acceptable water quality?**

   Water quality criteria based on different physico-chemical or biological parameters for particular use, stipulated by Regulatory authorities are the acceptable water quality.

4. **What is Designated best use classification?**

   A surface water body is used for different purposes. Depending upon the best use of the segment of water body, Central Pollution Control Board has established the Designated best use classification.

5. **How many uses are identified under Designated best use classification?**

   Five major uses of water bodies have been identified and classified as Class-A, Class-B, Class-C, Class-D and Class-E.

6. **What are Class-A water bodies?**

   These are Drinking water sources without conventional treatment but after disinfection.

7. **What are the tolerance limits for Class-A water bodies?**

   Tolerance limits for Class-A water bodies are pH should be between 6.5-8.5, Dissolved Oxygen should be 6.0 mg/L or above, Biochemical Oxygen Demand (BOD) should be 2 mg/L or less and total Coliform Organisms shall be 50 MPN/100 ml or less.

8. **What are Class-B water bodies?**

   Class-B water bodies are used for Outdoor bathing.

9. **What are the tolerance limits for Class-B water bodies?**

   Tolerance limits for Class-B water bodies are pH should be between 6.5-8.5, Dissolved Oxygen should be 5.0 mg/L or above, Biochemical Oxygen Demand (BOD) should be 3 mg/L or less and total Coliform Organisms shall be 500 MPN/100 ml or less.

10. **What are Class-C water bodies?**

    These are Drinking water sources with conventional treatment and after disinfection.

11. **What are the tolerance limits for Class-C water bodies?**

    Tolerance limits for Class-C water bodies are pH should be between 6.0-9.0, Dissolved

Oxygen should be 4.0 mg/L or above, Biochemical Oxygen Demand (BOD) should be 3 mg/L or less and total Coliform Organisms shall be 5000 MPN/100 ml or less.

12. What are Class-D water bodies?

These are used for Fish culture and wild life propagation.

13. What are the tolerance limits for Class-D water bodies?

Tolerance limits for Class-D water bodies are pH should be between 6.5-8.5, Dissolved Oxygen should be 4.0 mg/L or above, Biochemical Oxygen Demand (BOD) should be 3 mg/L or less and Free Ammonia (as N) 1.2 mg/l or less.

14. What are Class-E water bodies?

These are used for Irrigation, industrial cooling and controlled waste disposal.

15. What are the tolerance limits for Class-E water bodies?

Tolerance limits for Class-E water bodies are pH should be between 6.0-8.5, Electrical Conductivity at 25^0C should be 2250 micro mhos/cm max., Sodium absorption ratio max. 26 and Boron max. 2 mg/L.

16. What are the factors that affect water quality?

Water quality is influenced by climatological condition and geochemical location of the water body as well as anthropogenic activities.

17. Which limits should be followed in wastewater treatment plant discharges?

Wastewater discharge limits specified by Ministry of Forest, Environment and Climate Change for different sources and General wastewater discharge standards are considered on the type of industry or municipal setup.

18. What do "acceptable limit" and "permissible limit" in case of drinking water specification (IS: 10500 (2012)) mean?

Values above the "acceptable limit" render the water not suitable. "Permissible limit" prescribes a higher value than the "acceptable limit" which may be tolerated in absence of alternate source. But, if the value exceeds the "permissible limit", then the source will have to be rejected.

19. What is Dissolved Oxygen?

The amount of oxygen available in water in dissolved form is called dissolved Oxygen (DO).

20. Why Dissolved Oxygen in water is important?

The concentration of dissolved oxygen in water is very important for sustenance of aquatic life and waste degradation in water by natural process.

21. What is BOD?

The Biochemical Oxygen Demand (BOD) is a measure of the oxygen required by aerobic micro-organisms to biochemically oxidize the organic matter present in the waste and is expressed in mg/L. BOD determines the waste load of a water body.

22. What is COD?

Chemical Oxygen Demand (COD) is a measure of the amount of oxygen required to chemically oxidize organic and inorganic pollutants in water. DO, BOD and COD are major key indicators of water pollution.

23. What is water pollution?

Water pollution occurs when harmful substances—often physico- chemicals or microorganisms—contaminate a stream, river, lake, ocean, aquifer, or other body of water, degrading water quality and rendering it unsuitable for its beneficial uses.

24. What are the categories of water pollution?

Water pollution is categorised based on source of pollution (point source or nonpoint source) and the type of water body it is impacting (groundwater, surface water, or ocean water).

25. What is a Point source pollution?

When contamination originates from a single source, it's called point source pollution. Examples include wastewater discharge from an unit/ establishment.

26. What is a Non-Point source pollution?

Non-point source pollution is contamination derived from diffuse sources i.e. agricultural or storm water runoff

27. What is a Transboundary pollution?

Pollution that crosses administrative or political boundaries, such as rivers flowing from one State or Country to another carrying pollutant. Transboundary pollution between two states is called Interstate transboundary pollution.

28. What is Eutrophication?

Eutrophication is caused by excessive increase in nutrients, such as phosphate and nitrate, in water due to the discharging of non-treated sewage.

29. How Groundwater is polluted?

Ans. Groundwater can be affected by both geogenic (resulting from geological processes) and anthropogenic (resulting from human activity) pollutants.

30. What are the different sources of groundwater pollution due to anthropogenic activities?

- Industrial waste storage, mining wastes located above or near aquifers,
- Agricultural practices such as the application of large amounts of fertilizers and pesticides,
- Leakage from underground storage tanks containing gasoline and other hazardous substances,
- Leachate from landfills, poorly designed and inadequately maintained septic tanks

31. What are the priority contaminants in Groundwater?

Salinity (usually monitored as electrical conductivity (EC) or total dissolved solids (TDS)), acidity (pH), major ions, nitrate, arsenic, iron, manganese, lead, cadmium, mercury, fluoride and microbiological pollutants.

32. How can Industrial water pollution be controlled?

By setting up effluent treatment plants, regular monitoring of treated water, recycle and reuse of treated wastewater, industrial water pollution can be controlled.

33. How can domestic waste water pollution be controlled?

By setting up of Sewage treatment plants to treat municipal waste water, preventing direct discharge of untreated wastewater into water bodies and prohibiting dumping of solid waste along the bank of water bodies.

34. What is water quality improvement?

Water quality improvements involves treatment, or conditioning of water, by any means, to modify, enhance, or improve its quality or to meet a specific water quality need, desire, or set of standards.

35. What type of health issues can be related to water quality?

The presence of certain contaminants in water can lead to health issues, including gastrointestinal illness, reproductive problems, neurological disorders and other chronic health effects.

36. What is Sampling of Water for testing purpose?

Sampling is collection of a representative sample from the monitoring area, in small volume adequate for required analysis.

37. What is Grab sampling?

Grab sampling involves collecting a single discrete sample from a specific location and time. It's a quick method for obtaining representative sample, often used in water quality assessment, environmental monitoring, and industrial process control.

38. What is composite sampling?

Composite sampling involves combining multiple individual samples, taken at different times or locations, into a single, representative sample to get an average representation of the sampling location or time.

39. What is a polluted river stretch?

Polluted river stretches (PRS) are the stretches on a river segment comprising of consecutive polluted monitoring stations (with BOD value greater than 3.0 mg/L.

40. What are the different categories of Polluted River stretches?

On the basis of BOD level, CPCB has categorised the Polluted River stretches under five categories, such as Priority-I, Priority-II, Priority-III, to Priority IV and Priority-V.

41. What are the BOD levels specified for different priority categories?

For Priority-I to V, BOD levels are : more than 30.0 mg/ L, 20.0 – 30.0 mg/ L , 10.0 – 20.0 mg/ L, 6.0 – 10.0 mg/ L and 3.0 – 6.0 mg/ L respectively.

42. What is the Mandate of SPCBs for Water Quality Monitoring under Water (PCP) Act, 1974?

Mandate of the State Pollution Control Boards are to Collect and disseminate information related to water pollution, conduct water quality monitoring, planning of water pollution control programme, advise the State Government in pollution control issues

43. What is NWMP?

CPCB has established the National Water Quality Monitoring Programme (NWMP), a nation-wide programme for monitoring of Water quality of surface water bodies as well as ground water.

44. How many numbers of NWMP monitoring stations are there in Odisha?

388 **numbers** of stations are being monitored by State Pollution Control Board, Odisha (covering rivers, lakes, ponds, creeks, canals, sea, and ground water) for 45 different physico-chemical and microbiological parameters.

45. What is WQI?

Water quality index (WQI) is either a single value or expression to denote quality of water of river with regard to human health and the environment.

46. How can you express WQI?

CPCB has devised WQI to express water quality of river as "satisfactory" or "Unsatisfactory" based on four criteria parameters such as DO, BOD, Total Coliform (TC) and Fecal Coliform (FC).

47. What are the limits for Satisfactory WQI?

DO (should be 4.0 mg/L or above), BOD (should be 3.0 mg/L or less), Total coliform (should be 5000 MPN/100 ml or less) and Fecal coliform (should be 2500 mg/L or less.

48. What are the limits for Unsatisfactory WQI?

Any one parameter with values outside the stipulated limit for Satisfactory WQI, will render it "Unsatisfactory".

49. What are the other water quality monitoring programme of the Board?

Board also measures water quality of different drains, rivulets, streams, inlet and outlet of ETPs and STPs, in and around different industrial areas, impact of idol immersion on rivers, mass bathing during Kartik Purnima.

50. What are the actions taken by the Board to curb the impact of idol immersion on water bodies?

Board create awareness through public notice on guidelines of idol immersion in

temporary immersion ponds; conducts water quality monitoring on pre, during and post- idol immersion days; instructs the municipal authorities for cleaning of the ponds in next 24 hours of immersion and dumping of immersion left overs in municipal dumpsites.

51. How the Central Laboratory support Pollution control activities of the Board?

By conducting monitoring and analysis work, data sharing to appropriate authorities, providing support to the Government in pollution control decision making processes.

52. What is Biomonitoring?

Biomonitoring of water bodies is conducted to assess over-all biological health of the water bodies influenced by the changes in its physical and chemical environment.

53. What are the indicators of Biomonitoring?

Benthos are regarded as the best indicator of pollution as they are sedentary, sessile, long-lived and easily collectable.

54. How Biological class of water body is determined by Biomonitoring?

By calculation of Saprobic index and Diversity index values from the Benthos collected from approximately 500 m stretch along a river and using the Biological Water Quality Class Table.

55. Whether the Board's laboratory conduct Biomonitoring?

Yes. Board's laboratory conduct biomonitoring of eight river systems like Mahanadi, Brahmani, Rushikulya, Nagavali, Subarnarekha, Budhabalanga, Vansadhara, Kolab at 26 stations.

56. Whether the monitoring data are publicly available?

Yes. Board has established a wide network of water quality monitoring and ambient air quality monitoring of the State and all such data are uploaded in Board's website in public domain.
(Web link: https://ospcboard.odisha.gov.in/environmental-monitoring-data/)

57. What is Blue Flag beach certification Program?

It is a globally recognized eco-label awarded to clean and environmentally sound beaches by an international agency Foundation for Environment Education, Denmark.

58. Whether the Board's laboratory conduct water quality monitoring of 'Blue Flag Beaches' of Odisha?

Yes. Board monitors the water quality of Blue Flag beach at Puri and at Sonapur (Ganjam district) in compliance to its Blue Flag beach certification purposes.

16.3 Soil & Hazardous Waste Monitoring

1. **What is the purpose of soil testing from an industrial area?**

   To assess the levels of contaminants & their potential impact on the environment & human health.

2. **How does industrial waste affect the soil?**

   Improper disposal of highly toxic industrial/ chemicals waste can severely pollute the soil and also contaminate ground water.

3. **What are the different types of soil?**

   There are normally three types of soil like Clay, Sandy & Loamy soil.

4. **What is the Common type of soil sampling?**

   There are two types of Soil Sampling i.e. Grab Sampling & Composite Sampling.

5. **What is Grab Sampling?**

   Grab sampling is a single sample taken at one point at a time and space.

6. **What is Composite sampling?**

   While composite sampling involves collecting multiple grab samples over a period or at different locations.

7. **What are the methods of sampling based on probability?**

   There are 4 types of probability sampling:
   - Simple random sampling
   - Systematic sampling
   - Stratified sampling
   - Cluster sampling

8. **What are the methods of sampling based on non-probability?**

   Types of non-probability Sampling:
   - Convenience Sampling
   - Purposive Sampling
   - Quota Sampling
   - Snowball sampling

9. **What are the 5 steps to have a representative sample?**

   This step-by-step field guide is a summary of the best practices to collect representative samples given below:
   - Plan on where to sample.
   - Decide on a sampling depth.

- Decide on your sampling tool.
- Collect at least 10 cores in a zigzag pattern to create each composite sample.
- Thoroughly mix the soil cores.

10. Describe the Soil Testing Procedure?

It involves four steps like

- Sample Collection: Soil samples are typically collected using tools like soil augers or shovels, with multiple sub-samples combined to create a composite sample that represents the area
- Sample Preparation: Collected samples may be dried, crushed, and sieved to remove debris and prepare them to 2mm particlesize for analysis.
- Laboratory Analysis: Soil samples are sent to a laboratory for analysis, where various tests are conducted to determine nutrient levels, pH, and other properties.
- Interpretation of Results: The results from laboratory analysis are then interpreted to make informed decisions about soil management, fertilizer application, and other relevant practices.
- Generation of test reports for communication.

11. What are the types of equipment used for soil sampling?

- Coliwasa: Used for sampling waste that consists of several immiscible liquid phases.
- Dipper: Used for the collection of liquids & free flowing slurries.
- Thief: Used to sample dry granules or powdered wastes whose particles diameter is less than one third the width of the slots.
- Trier: Used for collection of moist samples or sticky solids with a particle diameter less than one half diameter of the trier.
- Auger: Used for hard & packed solid waste samples or soil.
- Scoops & Shovels: Used for collection of granular or powdered material in bins, shallow containers & conveyor belts.

12. What is the normal depth of Soil & Hazardous waste samples?

For normal soil, depth 0-15 cm & for hazardous soil, depth is up to 1.5 meters.

13. What is Hazardous waste Sample?

A hazardous sample refers to a small quantity of a substance that is considered dangerous or harmful to human health, safety, or the environment is termed as hazardous waste sample.

14. When was Hazardous Waste Management Rules enacted?

Hazardous Waste Management Rules came into effect in the year 1989 and later amended, final amendment was done in 2016 as Hazardous Waste (Management, Handling & Transboundary movement) Rules.

15. What are the various amendments of Hazardous waste Rule?

Hazardous Waste (Management, Handling & Transboundary movement) Rules first came in 2008, then in 2016 & final in 2024 as Hazardous & other wastes (Management & Transboundary Movement) amendment rules, 2024 is effective from 1st April 2024.

16. What do you mean by soil sample processing?

Soil sample processing is the procedure used to prepare soil samples for laboratory analysis. Normally soil samples are under. for air drying, then it is converted to powder form of 2mm particle size.

17. What are the basic things needed for collection of soil samples?

Normally a minimum of 500g sample is sufficient for analysis. Important things are

- Sampling Equipment
- Zipper Polythene bag
- GPS Meter
- Sample Collection Format
- PPE (Personal protective Equipment as required)

18. Which soil samples are categorized as Hazardous samples?

If the concentration of different parameters exceeds the limit mentioned in scheduled-2 of CPCB, then it will be categorized as Hazardous sample.

19. What are the important physical parameters are analyzed in Soil laboratory?

Bulk Density, Particle Density, Moisture, Cation Exchange Capacity, Water Holding Capacity, Texture, pH, Conductivity etc.

20. What are the important chemical parameters are analyze in Soil & HW laboratory?

Organic Carbon & Matter, Total Nitrogen, Available Nitrogen, Ammoniacal Nitrogen, Available Phosphorus, Phosphate, Sodium & Potassium, Calcium & Magnesium, chloride, Total Soluble Sulphate, Total Soluble Solids, Volatile solids, Available Boron, Nitrate & Nitrite, Carbonate & Bicarbonate, Hexavalent Chromium, Heavy metals (Total Digestion), TCLP Extraction, STLC Extraction & DTPA Extraction) etc.

21. What is the Carbon & Nitrogen ratio of normal Soil?

It is 12:1

22. What is the percentage content of organic matter in Indian soil?

It is <0.5%

23. What is the main factor affecting soil permeability?

Particle Size

24. What is the role of microorganism in soil?

Nutrient cycling & Organic matter decomposition.

25. What is the definition of soil porosity?

The amount of pore space in the soil, which influences water and gas exchange is called porosity of soil

26. What is the main purpose of soil texture?

To classify soils into different types based on their particle size distribution.

27. What is the purpose of soil classification?

The purpose of soil classification is to categorize various types of soils into groups according to their engineering or agricultural properties.

28. In soil testing, what is NPK?

Nitrogen, Phosphorus & Potassium. NPK refers to the three macronutrients essential for plant growth: Nitrogen, Phosphorus, and Potassium. These are the most measured soil nutrients.

29. What is the common conversion factor used to estimate Soil Organic Matter from Soil Organic Carbon?

Soil organic carbon is a key indicator of Soil health. Common conversion factor used to estimate soil organic matter from soil organic carbon is 1.724

30. What is TCLP Test in Hazardous waste sample?

TCLP means Toxicity Characteristics Leaching Procedure is based on USEPA Method 1311, applicable for determination of mobility of metals &semi volatile organic compounds in solids. The solid sample is extracted (20:1 liquid to solid ratio) by shaking it end over end for 18±2 hr at a controlled temperature.

31. What is STLC Test in Hazardous Waste sample?

STLC Stands for Soluble Threshold limit Concentration This analysis determines the amount of each analyte that is soluble in the 'Waste Extraction Test (WET) leachate. The sample is tumbled in 10 times its weighs 0.2M Sodium Citrate buffer for 48 hours.

32. What does Secured landfill mean?

A "secured landfill" is designed to prevent environmental contamination, especially with hazardous waste, The solid sample is extracted (10:1 water to solid ratio) by shaking it end over end for 24 hr at a controlled temperature.

33. What is DTPA & Why is it used?

DTPA stands for diethylene triamine penta acetic acid, used to assess the availability of micronutrients like zinc, copper, iron, and manganese. A soil sample is mixed with a solution containing DTPA, triethanol amine (TEA), and calcium chloride ($CaCl_2$).The mixture is shaken, allowing the DTPA to extract the available micronutrients from the soil.

34. How are total concentration of heavy metals determined in Soil & hazardous waste sample?

Total heavy metal concentration in soil and hazardous waste samples is determined by first extracting the metals from the sample matrix (soil, waste) through a digestion process, then analyzing there sulting solution using Atomic Absorption Spectroscopy & result is expressed in mg/kg.

16.4 Coastal Monitoring

1. **What is coastal pollution?**

   Coastal pollution refers to the contamination of coastal waters, beaches, and ecosystems due to human activities like untreated wastewater discharge, plastic littering, industrial runoff, and oil spills.

2. **What are the major sources of coastal pollution in Odisha?**

   Key sources include aquaculture effluents, domestic sewage, industrial discharge, plastic waste, port activities, and runoff from agriculture.

3. **How does coastal pollution affect marine life?**

   It leads to oxygen depletion, coral bleaching, ingestion of plastics by fish, decline in biodiversity, and bioaccumulation of toxins in marine food chains.

4. **Can coastal pollution affect human health?**

   Yes. Contaminated seafood and water can cause gastrointestinal diseases, skin infections, and long-term exposure may lead to heavy metal toxicity.

5. **How is SPCB monitoring coastal pollution?**

   Through regular sampling and analysis of water, sediment, and biota across designated coastal stations under the Coastal Management Cell (CMC).

6. **What are coastal micro plastics?**

   Micro plastics are plastic particles less than 5 mm in size, originating from the breakdown of larger plastics or as micro beads in cosmetics and detergents present in coastal areas.

7. **Where are micro plastics found in coastal Odisha?**

   Studies have found micro plastics in seawater, sediments, and marine organisms in different locations around the world including coastal beaches of Odisha.

8. **Why are micro plastics dangerous?**

   They can enter the food chain when ingested by marine organisms, absorb toxic chemicals, and may pose health risks to humans through seafood consumption.

9. **Can micro plastics be removed from the sea?**

   Large-scale removal is difficult, but reduction at the source (e.g., improved waste management, bans on single-use plastics) is effective.

10. **What is being done to study micro plastic pollution in Odisha?**

    The Research & Development Wing of SPCB has initiated dedicated research projects in collaboration with scientific institutions to map and assess micro plastic contamination.

11. What are ghost nets?

Ghost nets are fishing nets that have been lost or abandoned in the ocean. They continue to entangle marine life and damage ecosystems.

12. Why are ghost nets a concern in coastal waters?

They trap fish, turtles, and even dolphins, leading to "ghost fishing." They also contribute to marine plastic pollution and habitat destruction.

13. How do ghost nets enter the sea?

Through storms, illegal dumping, or accidental loss during fishing operations.

14. How can ghost nets be removed?

Specialized diving teams and local fishermen can retrieve them. Some are recycled through fishing gear recovery initiatives.

15. Are there any programs in Odisha to tackle ghost nets?

Pilot efforts involving beach cleanups and fishing community engagement have started in select areas. CMC is integrating ghost net surveillance in Beach litter studies.

16. How can individuals reduce coastal pollution?

Avoid littering, use eco-friendly products, properly dispose of waste, reduce plastic usage, and participate in clean-up drives.

17. Is there a law against marine littering?

Yes. Littering beaches or seas is punishable under the Environment Protection Act, 1986, and Coastal Regulation Zone (CRZ) Notification, 2019.

18. What role do fishermen play in marine conservation?

They help report ghost nets, support monitoring efforts, and can adopt sustainable fishing practices to protect marine life.

19. Are there beach litter monitoring programs in Odisha?

Yes, under the Coastal Management Cell, beach litter surveys and pollution mapping are being conducted regularly in some designated tourist beaches of Odisha.

20. How can I report illegal dumping or ghost nets?

You can contact the Regional office of SPCB, or the local administration for timely action.

21. What is the Coastal Management Cell (CMC)?

CMC is a specialized wing of the State Pollution Control Board (SPCB), Odisha responsible for monitoring and caring coastal ecosystems studies in Odisha.

22. When was the CMC established?

It was established under the World Bank-assisted Integrated Coastal Zone Management Project (ICZMP) to strengthen coastal surveillance and management in 2010.

23. Where is the CMC located?

CMC operates from Central Laboratory, Patia, Bhubaneswar and Center for management of Coastal Ecosystem (CMCE), Paradeep with extended field activities across all six coastal districts of Odisha.

24. What is the primary goal of the CMC?

To generate time-series data on coastal environment of Odisha, disseminate findings to government authorities, and publish informative reports to raise awareness - ultimately promoting sustainable use, conservation, and pollution control of coastal and marine ecosystems.

25. How does CMC support pollution control in coastal areas?

By monitoring water and sediment quality, identifying pollution hotspots, and providing feedback to the Government for enforcing pollution control measures.

26. Is the CMC involved in research activities?

Yes, it undertakes and publishes research on marine biodiversity, pollution, and coastal vulnerabilities.

27. Who funds the activities of CMC?

Initial funding was through the World Bank ICZMP. Presently, funds are sourced from own fund of SPCB, Eenvironmental Compensation funds, EC and others.

28. How can citizens approach CMC with coastal concerns?

Citizens can contact SPCB or visit CMC office at Bhubaneswar or Paradeep.

29. What is the role of the CMC during oil spills or marine pollution incidents?

CMC coordinates with the Coast Guard, Port Authorities, and Industries for immediate response and ecological damage assessment.

30. What is the CMCE?

It is an advanced field unit of CMC, located in Paradeep, focused on in-situ coastal research and monitoring.

31. What kind of monitoring does CMC do?

The Coastal Management Cell operates a dedicated monitoring vessel for real-time sampling of water, sediment, and biota, capable of analyzing 77 water and 18 sediment parameters for comprehensive coastal surveillance in Odisha.

32. What is the significance of CMC in ecosystem health assessment?

CMC generates vital scientific data to assess pollution and ecological health of estuaries, mangroves, beaches, and marine biodiversity, focusing on phytoplankton and zooplankton as key indicators of coastal food webs.

33. How does CMC support coastal planning?

CMC provids data for the State Coastal Action Plan, pollution zoning, and vulnerability mapping, which helps inform strategic and sustainable coastal development.

34. Does CMC work with research institutions?

Yes. CMC established a dedicated R&D wing in 2023 to undertake collaborative research on key environmental issues in Odisha, partnering with IIT Bhubaneswar, Sambalpur University, CSIR-IITR Lucknow, KIIT Bhubaneswar, OUAT Bhubaneswar, CIPET Bhubaneswar, and GUIDE Gujarat.

35. What are some notable projects of R&D, CMC?

At present, the R&D Wing is executing eight dedicated projects addressing critical environmental challenges across Odisha. These include:

i) Assessment of beach litter pollution across select beaches along the Odisha coast;
ii) Enumeration of heavy metals and pesticide residues in water, soil, rice grains, vegetables, and patient samples, along with their impact on public health in the Hirakud Irrigated Command Area, Sambalpur;
iii) Design, optimization, and demonstration of chemical column and pressure injection treatment combined with phyto-remediation to enhance shear strength characteristics of abandoned ash ponds;
iv) Stabilization and remediation of mine overburden using phyto-remediation techniques in mining-affected regions of Odisha;
v) Comprehensive assessment of fluoride contamination in the vicinity of aluminium smelters in Angul, Jharsuguda, and Hirakud;
vi) Pollution assessment of the Gangua River Basin in Bhubaneswar, including pilot-scale implementation of wastewater treatment and water conservation measures;
vii) Carrying Capacity Assessment of the Brahmani-Baitarani Basin, integrating industrial and ecological parameters;
viii) Evaluation of water and wastewater use in industries under SPCB's Consent Management System, with piloting of innovative water treatment technologies.

36. Is CMC data publicly available?

Yes, findings are shared in the form of reports, booklets, and research papers. Detailed data can be requested from the State Pollution Control Board, Odisha.

37. Does CMC operate under any regulatory framework?

Yes, CMC functions in accordance with the CRZ notifications, Environment Protection Act, and CPCB guidelines.

38. What is CRZ?

CRZ stands for Coastal Regulation Zone. It refers to regulated coastal areas for conservation and development under Environment Protection Act, 1986.

39. Who issues CRZ notifications?

The Ministry of Environment, Forest and Climate Change (MoEF&CC), Government of India, is the authority responsible for issuing CRZ notification.

40. What is the latest CRZ notification?

The latest is CRZ Notification, is from the year 2019, which supersedes the 2011 notification.

41. What does CRZ aim to protect?

CRZ aims to protect sensitive Coastal ecosystems like mangroves, estuaries, coral reefs, sand dunes, and livelihoods of coastal communities.

42. How are CRZ areas categorized?

CRZ areas categorized in to four zones CRZ-I to CRZ-IV based on ecological sensitivity and type of activity permitted.

43. What is CRZ-I?

CRZ-I includes highly ecologically sensitive zones like mangroves, turtle nesting areas, and intertidal zones where construction is strictly prohibited.

44. What is CRZ-II?

CRZ-II refers developed areas close to shorelines, where regulated construction is allowed.

45. What is CRZ-III?

CRZ-III includes undeveloped rural areas; limited construction with eco-sensitive norms is allowed.

46. What is CRZ-IV?

CRZ-IV refers the aquatic area between Low Tide Line and 12 nautical miles in the sea; it regulates marine pollution and waste disposal.

47. Do CRZ rules apply to aquaculture?

Yes. Aquaculture is regulated under CRZ and Aquaculture Authority Act to ensure ecological damage.

48. Who gives CRZ clearance in Odisha?

CRZ clearances is granted by the Odisha Coastal Zone Management Authority (OCZMA) and State Environment Impact Assessment Authority (SEIAA), based on recommendations from SPCB and concerned departments.

49. What is required for CRZ clearance?

A project seeking CRZ clearance must submit project proposal, Environmental Impact Assessment (EIA), CRZ map indicating HTL & LTL, and public hearing (for major projects).

50. What is a CRZ map?

A CRZ map is a legally certified map indicating high tide line (HTL), low tide line (LTL), and CRZ category boundaries using satellite imagery and ground truthing.

51. Can individuals build houses in CRZ area?

Yes, but only in CRZ-II and specific parts of CRZ-III with and strictly; prior approval and compliance with CRZ guidelines.

52. Is tourism allowed in CRZ areas?

Yes, eco-tourism is permitted with proper waste management protocols and obtaining CRZ clearance in CRZ-III and CRZ-II.

53. Are ports and harbors covered under CRZ?

Yes, all port development and expansion activities are subject to CRZ guidelines and require environmental clearance.

54. Can sand mining be done in CRZ areas?

Sand mining is allowed only with strict regulations, unregulated or illegal sand mining is a punishable offence.

55. What are the penalties for CRZ violations?

Demolition of illegal structures, fines, and legal action under Environmental Protection Act, will be the result of violating CRZ regulations.

56. What is Public Hearing in CRZ projects?

It's a public consultation process to understand community concerns before CRZ clearance.

57. Where can I report a CRZ violation?

To the Regional Office of SPCB, local OCZMA cell, or District Collector.

58. Why is coastal management important?

To safeguard biodiversity, prevent erosion, support livelihoods, and mitigate climate change impacts.

59. How can citizens contribute to coastal protection?

Citizens can help by avoiding plastic littering, reporting illegal constructions, and participating in beach clean-up drives and using eco-friendly products.

60. What are the threats to Odisha's coast?

Industrial pollution, unregulated aquaculture, marine litter, climate change, and illegal encroachments are the major threats.

61. What species are protected under coastal conservation?

Olive Ridley turtles, mangroves, sea grasses, crabs, and mollusks.

62. Does climate change affect the coast?

Yes, through sea-level rise, saltwater intrusion, and frequent cyclones impacting coastal settlements.

63. What is a Coastal Action Plan?

It is a district-wise strategy prepared by the state to manage coastal ecosystems, pollution, and disaster risks.

64. Are fishing communities part of coastal planning?

Yes, they are consulted in planning and benefit from schemes for sustainable fisheries.

65. What is beach carrying capacity?

The maximum number of visitors or activities a beach can support without damaging the environment.

66. Can mangroves be cut for development?

No, mangroves are protected under CRZ-I and Forest laws; clearance is rarely granted.

67. Has Odisha identified any Marine Biodiversity Hotspots?

Yes, regions like Chilika, Devi River mouth, Rushikulya and Bhitarkanika are identified as biodiversity hotspots due to the presence of rare and endemic species.

68. What are 'Blue Flag Beaches' and does Odisha have any?

Blue Flag is an international eco-label awarded to clean and environmentally sound beaches. Odisha's Puri Beach has received this status.

69. What is the Odisha Coastal Zone Management Authority (OCZMA)?

It is the apex state body constituted by MoEF&CC to evaluate CRZ proposals and ensure coastal regulatory compliance in Odisha.

70. What legal provisions support coastal conservation?

Key legislations include the Environment Protection Act (1986), CRZ Notification (2019), Water Act (1974), and Wildlife Protection Act (1972).

71. What is the role of District Collectors in coastal regulation?

They chair the District Environmental Monitoring Committees (DEMCs) and coordinate enforcement of CRZ norms and pollution control measures.

72. Is there a Coastal Zone Management Plan (CZMP) for Odisha?

Yes, the Odisha CZMP has been prepared and approved by MoEF&CC, and guides all CRZ clearances in the state.

73. What is the role of National Centre for Sustainable Coastal Management (NCSCM)?

NCSCM supports CRZ mapping, policy research, and capacity building at the national and state level, including technical assistance to concern State.

74. How are local communities involved in coastal protection?

Through participatory mapping, awareness programs, eco-clubs, and livelihood diversification initiatives.

75. What is a Beach Management Committee (BMC)?

A local level committee comprising civic bodies, NGOs, fishermen, and government officials to manage beach cleanliness and sustainable tourism.

76. How can fishermen be affected by CRZ rules?

Traditional fishing activities are permitted but large construction / infrastructure or permanent housing may need CRZ clearance.

77. Where can complaints about coastal pollution or encroachment be filed?

Complaints can be submitted to Regional Offices of SPCB, District Collectors, or OCZMA.

78. Where can I learn more about coastal regulations?

Visit www.ospcboard.org, MoEF&CC website, or contact local SPCB offices.

17. Central Laboratory

1. **Why laboratory tests are important?**

   Laboratory tests provide information about the present characteristics of the sample with respect to various physico-chemical and microbiological parameters and can be used to assess the risk factors and to take decisions for restoration measures.

2. **Are tests in Laboratories of the Board accurate?**

   Yes. Testing performed in Laboratories of the Board are carried out by trained and experienced professionals following international or national standard test procedures, quality control and quality assurance procedures.

3. **How much a laboratory test costs?**

   Cost of a laboratory test includes sampling and analysis charges. Details can be downloaded from the Board's website.
   (https://ospcboard.odisha.gov.in/?s=revised+analysis).

4. **What do a laboratory test result mean?**

   Reference values are provided in the Test Report to determine whether the results are "within acceptable limits" for the intended use.

5. **What does it mean if test result is outside the reference value?**

   Test results outside the reference value indicate contamination of the source. There is a need of identification for source of contamination and to take action for its restoration.

6. **If the test results are within the reference value, what does that indicate?**

   In such cases, the test sample conform to the quality for its designated use with respect to the tested parameters. However, to maintain its pristine quality, care should be taken to prevent future contamination.

7. **Where are the laboratories of the Board situated?**

   Board has 14 Regional Offices and all have Laboratory facilities. However, these laboratories only conduct Board's regulatory sampling and analysis. The Central Laboratory of the Board situated at Plot No. 59/2 & 59/3, Chandaka Industrial Estate, Bhubaneswar is also open for public on payment basis.

8. **What types of testing services does Central laboratory offer?**

   Central Laboratory offers a comprehensive range of testing services, including sampling for water and wastewater samples, ambient air, Source emission, Fugitive emission, Ambient Noise, Soil, hazardous waste, municipal solid waste, plant and forage samples.

9. Is Central Laboratory of the Board accredited by NABL?

Yes. Certificate of NABL accreditation of Central Laboratory and Scope of accreditation is available in Boards website (https://ospcboard.odisha.gov.in/divisions/central-laboratory/about-central-lab/)

10. Can Industries under consent administration submit samples for analysis for testing on payment basis?

No. As such units under consent administration, Board will only conduct regulatory sample collection and analysis as per procedure.

11. How can one contact Central Laboratory of the Board?

A person can contact by visiting Central Laboratory or by Contacting the Central Laboratory-in-Charge through email centrallab@ospcboard.org.

12. How can a sample be submitted to the Central Laboratory?

After collection of samples, one can submit the sample in person as early as possible. Detail information on source of sampling, date and time of sample collection, testing requirements, intended use of samples and contact details are to be provided along with the sample.

13. Whether the Central Laboratory provides technical support on sampling?

Yes. The laboratory provides technical support on how to do sampling for various types of environmental samples, finalizing the testing requirements as per its intended use.

14. How much time will it take for getting the test result after sample submission?

The time taken for sample analysis and report submission varies with the volume of samples to be analysed, type of parameters to be analysed and existing sample load of the Laboratory.

15. How do I get reports of my lab test results?

The test reports will only be issued after deposit of the Cost of sample analysis (including cost of sampling, if any), either by cash or bank draft or through online transfer.

16. What are the working hours for walk-in services in laboratory?

The laboratories are open on all working days from 10.00 AM to 5:30 PM. However, the samples can only be received at laboratory within 4:00 PM.

17. I would like to conduct microbiological analyses in water samples. How should I sample the water and send it to the laboratory?

Sample collection process for microbiological analyses varies for different sources such as surface water, drinking water (tap water), ground water (tube well / Bore well/ dug well) and waste water. If required, technical support will be provided by the Central laboratory.

18. I would like to conduct chemical analyses for my water sample. How should I sample the water and send it to the laboratory?

The sample amount is extremely important for analysing all parameters and providing accurate results. Therefore, you must first contact the Central Laboratory to decide on which tests should be carried out and find out the sample amount to be required.

18. Micro-Biological Laboratory

1. **What is Microbiological pollution in water body?**

   Microbiological pollution in water body is due to the presence of harmful micro-organisms like bacteria, viruses & protozoa.

2. **Why water is tested for Coliform Organisms rather than pathogens?**

   Testing for Coliforms in water body is faster, less expensive, easier, more reliable and can be done in a general microbiological laboratory rather than pathogens.

3. **Can Coliform bacteria cause diseases when we drink contaminated water? If yes, name the diseases?**

   Not all Coliforms cause diseases but some Fecal coliform strains can cause mild to serious illness, such as gastrointestinal disorders, nausea, vomiting and some flu-like symptoms.

4. **If I got coliform organisms after testing my tap water, then what should I do?**

   It is advised to boil the water at least for one minute before consuming. Inform local authority regarding contamination.

5. **Is E. coli in water body harmful to us?**

   Yes. E. coli in Water body indicates recent fecal contamination and presence of harmful pathogens may be in water body. Some strains of E.coli (STEC, ETEC, EIEC, EPEC) are pathogenic.

6. **Name the test method for testing of coliform bacteria in Drinking water?**

   Multiple Tube fermentation technique and Membrane filtration Technique are the test method for coliform bacteria in Drinking water.

7. **What is MPN/100mL?**

   MPN/100mL is the Most Probable Number of bacterial count per 100ml of water sample measured by Multiple Tube fermentation Technique.

8. **What is CFU/100mL?**

   CFU/100mL is the number of Colony Forming units per 100 ml of water sample measured by Heterotrophic plate count method.

9. **What are the parameters to assess Microbiological quality of drinking water?**

   Total coliform and E. coli.

10. **Why do you test Fecal streptococci/Intetstinal enterococci in water body?**

    To identify Fecal contamination and presence of potential pathogens.

11. Which Indicator bacteria are used to evaluate the water quality of Recreational water?

E. coli and Intestinal Enterococci

12. How do you collect water sample for micro-biological analysis?

Water sample should be collected in a sterile, non-toxic Bottle by following aseptic technique.

13. How much water is collected for microbiological analysis?

A sample volume of 250mL is collected for microbiological analysis.

14. What is the holding time of Drinking water samples for Total coliform and E. coli analysis?

For Total coliform and E. coli analysis, the holding time from collection to analysis is 30 hours at a temperature 2^0C to 10^0 C.

15. How do you ensure the accuracy and reliability of test results?

By following validated test method, regular maintenance of equipment, calibrating Instruments and Good Laboratory practices.

16. When you enter into a Microbiological laboratory, what safety measures should you follow?

Do not touch working areas, contaminated cultures, do not eat or drink in a Microbiological Laboratory.

17. How can I disinfect my well if it is contaminated with Coliform bacteria or other microorganisms?

Chlorine solution or Household bleach is used to disinfect the well. 1miligram/Litre is needed to disinfect the water.

18. What is the permissible limit for Total coliform and E. coli in drinking water?

Total coliform bacteria and E. coli should be absent in drinking water.

19. Which microbiological parameters can be analysed in Board's laboratory?

Indicator bacteria like Total coliform, fecal coliform, E. coli, Fecal streptococci and Intestinal enterococci.

19. National Clean Air Program

1. **How is SPCB dealing with air pollution?**

   The air pollution from the industrial and mining sector is monitored through the CTO administration of the Board.

2. **How does SPCB manage to reduce air pollution caused by sources other than industries and mines?**

   Currently, SPCB is working in seven cities of Odisha to reduce air pollution from sources like vehicular emissions, construction & demolition dust emissions, and emissions due to municipal solid waste burning under NCAP. These cities are Angul, Balasore, Bhubaneswar, Cuttack, Kalinga Nagar, Rourkela, and Talcher.

3. **What is National Clean Air Programme (NCAP)?**

   Government of India has launched NCAP in 2019 with an objective to reduce PM_{10} in ambient air in 130 non-attainment cities of India, including seven cities of Odisha.

4. **What is the objective of NCAP?**

   The objective of NCAP is to reduce PM_{10} concentration by 40% from the levels of 2019-20 or to achieve 60 $\mu g/m^3$ (NAAQS Standard) by 2025-26.

5. **What is Air Quality Index (AQI)?**

   AQI is a subjective assessment of quality of air in terms of Good, Satisfactory, Moderate, Poor, Very Poor and Severe.

6. **What is the role of SPCB under NCAP?**

   SPCB is the nodal agency for implementation of NCAP in Odisha. It is working with stakeholders Departments like municipal corporations/municipalities and RTOs to reduce air pollution in the cities.

7. **Who are the executing authorities/departments under NCAP?**

   The municipal corporations/municipalities and RTOs are the executing authorities under NCAP. They are implementing action plans in respective jurisdictions.

8. **How is SPCB evaluating air quality?**

   SPCB is monitoring air quality in 17 cities using Continuous Ambient Air Quality Monitoring Stations (CAAQMS) and 21 cities by manual monitoring stations.

9. **Does public have access to the air quality data?**

   Yes, air quality data (CAAQMS) is uploaded in CCR portal of CPCB, and public can assess it through “SAMEER APP”. Further, manual monitoring data is available in SPCB's website.

10. How does NCAP address Vehicular Emissions?

NCAP promotes electric vehicles and use of cleaner fuels like CNG, LPG for transportation. Further it encourages use of public transport and reduces traffic congestion.

11. Is NCAP doing anything to control construction and demolition dust?

NCAP works with cities for proper collection of C&D waste, its processing, reuse and disposal.

12. How does NCAP address Road Dust?

Through NCAP, mechanical road sweeping machines and fog cannons have been employed in non-attainment cities to reduce pollution from roads. Further, end-to-end paving of roads is carried out to reduce dust generation.

13. How does NCAP address Waste Management?

NCAP promotes door to door collection of waste and its processing so that waste burning is reduced in cities.

14. What is the role of citizens to reduce pollution?

Citizens can reduce pollution by (i) reducing personal emissions by using public transport, carpooling, using electric or hybrid vehicles, (ii) adopting environmentally friendly practices (iii) reducing energy consumption, (v) disposing of waste to municipality (vi) spreading awareness, and (iv) reporting air pollution incidents.

15. Are there any penalties for cities under NCAP for not meeting targets?

Currently, there are no direct penalties for cities failing to meet air quality targets under the NCAP. However, the government monitors performance and reduces funding for the cities who does not meet the air quality targets.

16. What are the penalties for non-compliance under NCAP for citizens?

NCAP does not impose direct penalties on individual citizens for non-compliance. However, municipalities/RTOs have their own rules for imposing penalties for waste burning and vehicular emissions.

17. How can public report air pollution incidents?

Air pollution incidents related to open garbage burning, construction & demolition activities, vehicular pollution, industrial pollution, pollution from generators can be reported on SPCB website (https://ospcboard.odisha.gov.in/) and Janasunani portal of H&UD Dept.

18. What are the precautions to be taken in case air quality is poor, very poor and severe?

The following precautions should be taken in case air quality is poor, very poor and severe

i) Wear face mask

ii) Keep the surrounding area wet
iii) Don't burn any waste/ solid fuel
iv) Minimise vehicular movement

19. What are the health impacts of air pollution based on AQI levels?

Air Quality Index (AQI) levels indicate the concentration of pollutants in the air, which can have varying health effects. The categorisation of AQI with health impact is given below.

i) Good (0–50): minimal impact
ii) Satisfactory (51–100): Minor breathing discomfort to sensitive people
iii) Moderate (101–200): Breathing discomfort to the people with lungs, asthma and heart diseases
iv) Poor (201–300): Breathing discomfort to most people on prolonged exposure
v) Very Poor (301–400): Respiratory illness on prolonged exposure
vi) Severe (401–500): Affects healthy people and seriously impacts those with existing diseases

20. Polluted Industrial Area

1. What is a Polluted Industrial Area (PIA)?

A PIA is an industrial/mining cluster where the observation of air and water pollution is frequent.

2. How many Polluted Industrial Areas (PIAs) have been identified by CPCB in Odisha?

CPCB has identified five PIAs in Odisha, namely, Angul-Talcher, Ib-valley, Jharsuguda, Kalinga Nagar and Paradeep, based on quality of Ambient Air, surface water & ground water.

3. What is Comprehensive Environmental Pollution Index (CEPI)?

CEPI is a pollution index developed to assess pollution levels in PIAs to classify the PIAs and this was started in 2009 by CPCB.

4. How does CPCB classify the industrial areas using CEPI?

CPCB uses CEPI score to classify industrial areas as follows:

i) Critically Polluted area (CPA) for CEPI score ≥ 70

ii) Severely Polluted area (SPA) for $60 \leq$ CEPI score < 70

iii) Other Polluted area (OPA) for CEPI score < 60

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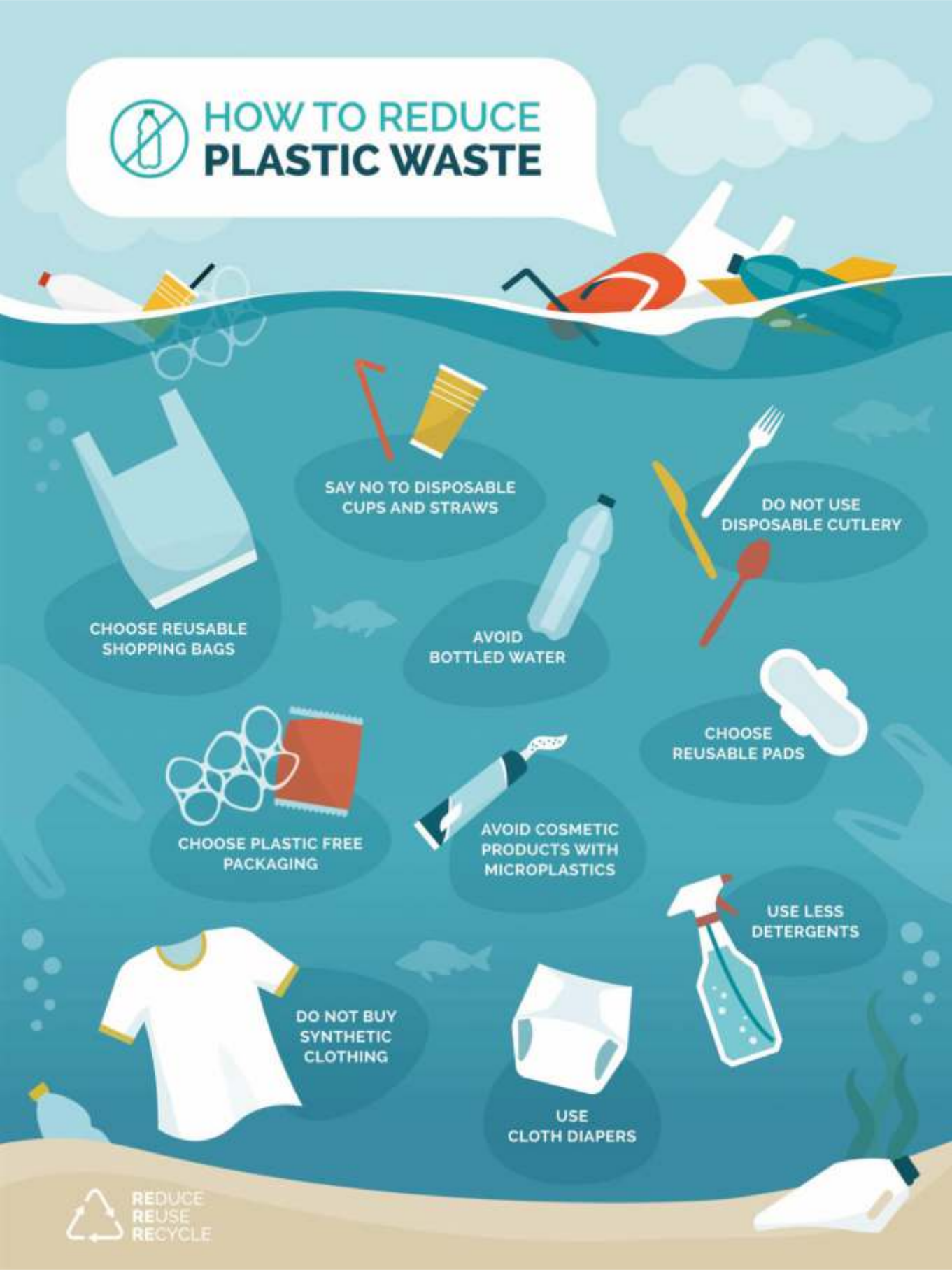
HOW TO REDUCE **PLASTIC WASTE**



REDUCE
REUSE
RECYCLE

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