



# आईआरईएल (इंडिया) लिमिटेड IREL (India) Limited

(Formerly Indian Rare Earths Limited)

(भारत सरकार का उपक्रम)

(A Govt. of India Undertaking)

CIN : U15100MH1950GOI008187 Website : www.irel.co.in

ISO 9001:2015, ISO 14001:2015 & ISO 45001:2018 Company

Ref. No.IRE/MK/MED/01/2025

April

2025

The District Environmental Engineer,  
Tamilnadu Pollution Control Board,  
318/46A, Water Tank Road,  
Nagercoil-629001.

Sub: Bio-Medical Waste Disposal Annual Report for the year 2024 in Form IV- reg:

Madam,

We enclose herewith the Annual Report on Bio-Medical Waste generated and disposed from our Unit during the period from January 2024 to December 2024 along with the Minutes of Bio Medical Waste Management Committee functioning at our Unit.

Thanking you,

Yours truly,  
For IREL (India) Ltd.,

(N. Selvarajan)

Chief General Manager & Head, MK

मणवालकुरिचि, कन्याकुमारी जिला, तमिलनाडु - 629 252.

Manavalakurichi, Kanyakumari Dist, Tamil Nadu - 629 252.

पंजीकृत कार्यालय: प्लॉट नं. 1207, वीर सावरकर मार्ग, सिद्धिविनायक मंदिर के पास, प्रभादेवी, मुंबई - 400 028.

Regd. Office: Plot No.1207, Veer Savarkar Marg, Near Siddhivinayak Temple, Prabhadevi, Mumbai - 400 028.

**Form – IV**  
**(See rule 13)**  
**ANNUAL REPORT**

[To be submitted to the prescribed authority on or before 30th June every year for the period from January to December of the preceding year, by the occupier of health care facility (HCF) or common bio-medical waste treatment facility (CBWTF)]

Sl. No.	Particulars		
1	Particulars of the Occupier	:	
	(i) Name of the authorized person (occupier or : operator of facility)	:	Shri.N.Selvarajan
	(ii) Name of HCF	:	IREL (India) Limited.
	(iii) Address for Correspondence	:	Manavalakurichi-629252,Kanniyakumari District
	(iv) Address of Facility	:	Manavalakurichi-629252,Kanniyakumari District
	(v) Tel. No, Fax. No	:	04651-237255
	(vi) E-mail ID	:	head.mk@irel.co.in
	(vii) URL of Website	:	www.irel.co.in
	(viii) GPS coordinates of HCF	:	Latitude: 08.085401 (N Decimal degrees) Longitude: 77.175201 (E Decimal degrees)
	(ix) Ownership of HCF	:	Central Public Sector Undertaking
	(x). Status of Authorization under the Bio-Medical Waste (Management and Handling) Rules	:	Authorization No.: <b>20BAC16364937 Dated 21/07/2020</b> One Time authorization
	(xi). Status of Consents under Water Act and Air Act	:	Valid upto:31/03/ 2029
2	Type of Health Care Facility	:	HCF-Common Facility member
	(i) Bedded Hospital	:	No. of Beds: <u>0</u>
	(ii) Non-bedded hospital Clinical Laboratory or Research Institute or Veterinary Hospital or any other)	:	Non-bedded
	(iii) License number and its date of expiry	:	-
3	Details of CBMWTF	:	M/s. Aseptic Systems BMW Company, Tiruelveli.- Authorized Agency of TNPCB
	(i) Number of health care facilities covered by CBMWTF	:	-
	(ii) No. of Beds covered by CBMWTF	:	-
	(iii) Installed treatment and disposal capacity of CBMWTF;	:	-
	(iv) Quantity of bio medical waste treated or disposed by CBMWTF	:	-
4	Quantity of waste generated or disposed in Kg per Annum (on monthly average basis)	:	<i>Yellow Category: 5.4kg/year</i> <i>Red Category: 6.1kg/year</i> <i>White: 0.35kg/year</i> <i>Blue Category: 2.75kg/year</i> <i>General Solid Waste: Nil</i>



5	Details of the Storage, Treatment, Transportation, Processing and Disposal Facility				
	(i) Details of the on-site storage facility	:	Generated BMW is sent to CBMWTF within 48hrs		
			Provision of on-site storage : (Cold storage or any other Provision ) -Nil		
	(ii) Disposal facilities		<b>Type of treatment equipment</b>	<b>No of Units</b>	<b>Capacity Kg/day</b>
					<b>Quantity Treated or disposed in kg per annum</b>
			Incinerators	0	-
			Plasma Pyrolysis	0	-
			Autoclaves	0	-
			Microwave	0	-
			Hydroclave	0	-
			Shredder	0	-
			Needle tip cutter or destroyer	2	0.03
					0.35
			Sharps	0	-
			Encapsulation or concrete pit	0	-
			Deep burial pits	0	-
			Chemical disinfection:	0	-
			Any other treatment equipment:	0	-
	(iii) Quantity of recyclable wastes sold to authorized recyclers after treatment in Kg per annum	:	Not applicable Red Category (like plastic, glass, etc.)		
	(iv) No. of Vehicles used for Collection and transportation of biomedical waste	:	Nil		
	(v) Details of incineration ash and ETP sludge generated and disposed during the treatment of wastes in Kg per annum			Quantity Generated	Where disposed
			Incineration	0	-
			Ash	0	-
			ETP Sludge	0	-
	(vi) Name of the Common Bio- Medical Waste Treatment Facility Operator through which wastes are disposed of		M/s. Aseptic Systems, Bio-Medical Waste Management Company, B1, C Colony, Perumalpuram, Tirunelveli - 627 007.		
	(vii) List of member HCF not handed Over bio - medical waste.		Not applicable		

6	Do you have bio-medical waste management committee? If yes, attach minutes of the meetings held during the reporting period		Yes. The minutes of the meeting held on 12-06-2024 and 05-12-2024 are attached.
7	Details trainings conducted on BMW		
	(i) Number of trainings conducted on BMW Management		1
	(ii) Number of personnel trained		5
	(iii) Number of personnel trained at the time of induction		5
	(iv) Number of personnel not undergone any training so far		Nil
	(v) Whether standard manual for training is available?		Yes
8	Details of the accident occurred during the year		
	(i) Number of Accidents occurred		Nil
	(ii) Number of persons affected		Nil
	(iii) Remedial Action taken (Please attach details if any)		Not applicable
	(iv) Any Fatality occurred, details		No
9	Are you meeting the standards of air Pollution from the incinerator? How many times in last year could not met the standards ?		Not applicable
	Details of Continuous online emission monitoring systems installed		Not applicable
10	Liquid waste generated and treatment methods in place. How many times you have not met the Standards in a year?		Nil
11	Is the disinfection method or sterilization meeting the log 4 standards? How Many times you have not met the standards in a year?		Not applicable
12	Any other relevant information		-

Certified that the above report is for the period from January 2024 to December 2024

Name and Signature of the Head of the Institution

Date: 10/4/2025

Place: Manavalakurichi



## IREL (India) Limited

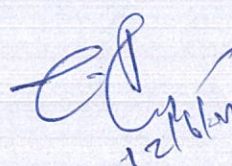
Manavalakurichi


Minutes of the Bio-Medical Waste Management Committee meeting held on 12-06-2024.

### Members attended

1. Shri.S.Jayachand DGM-Technical (Mining)-Chairman
2. Dr.T.Raja Manager-Medical – Convenor
3. Shri.K.G.Deepesh, Manager-Technical (Mining)-Member

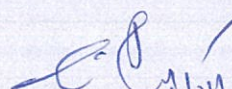
Sl No	Conditions	Action plan	Remarks
1	All the provisions of the Bio-Medical Waste Management Rules, 2016 must be complied with.		complied
2	The HCF shall take all necessary steps to ensure that bio-medical waste is handled without any adverse effect to human health and the environment and in accordance with the Bio-Medical Waste (BMW) Management Rules, 2016.	Daily monitoring done	
3	The HCF shall make a provision within the premises for a safe, ventilated and secured location for storage of segregated biomedical waste in colored bags or containers in the manner as specified in Schedule I of the BMW Rules, 2016. It shall be ensured that there shall be no secondary handling, pilferage of recyclables or inadvertent scattering or spillage by animals and the bio-medical waste from such place or premises shall be directly transported in the manner as prescribed in these rules to the common bio-medical waste treatment facility or for the appropriate treatment and disposal, as the case may be, in the manner as prescribed in Schedule I of the BMW Management Rules, 2016.	Segregated in colored bags and stored in safe location.	
4	The HCF shall pre-treat the laboratory waste, microbiological waste, blood samples and blood bags through disinfection or sterilization on-site in the manner as prescribed by the World Health Organization (WHO) guidelines on safe management of wastes from health care activities and WHO Blue Book, 2014 and then sent to the Common bio-medical waste treatment facility for final disposal.		complied


  
12/6/24

  
12/6/24



Sl No	Conditions	Action plan	Remarks
5	The HCF shall phase out use of chlorinated plastic bags (excluding blood bags) and gloves by 27 <sup>th</sup> March, 2019.		complied
6	The HCF shall dispose of solid waste other than bio-medical waste in accordance with the provisions of respective waste management rules made under the relevant laws and amended from time to time.		complied
7	The HCF shall not give treated bio-medical waste with municipal solid waste.		complied
8	The HCF shall establish a Bar-Code System for bags or containers containing bio-medical waste to be sent out of the premises or for the further treatment and disposal in accordance with the guidelines issued by the Central Pollution Control Board by 27 <sup>th</sup> March, 2019.		complied
9	The HCF shall ensure segregation of liquid chemical waste at source and also ensure pre-treatment or neutralization prior to mixing with other effluent generated from health care facilities.		complied
10	The HCF shall ensure treatment and disposal of liquid waste in accordance with the Water(Prevention and Control of Pollution) Act, 1974(6 of 1974).		complied
11	The HCF shall maintain and update on day to day basis the bio-medical waste management register and display the monthly record on its website according to the bio-medical waste generated in terms of category and colour coding as specified in Schedule I of the BMW Management Rules, 2016.	Displayed in IREL website.	
12	The HCF shall inform to TNPCB immediately in case the operator of a CBMWTF does not collect the bio-medical waste within the intended time or as per the agreed time.	Shall inform in such case.	
13	The HCF shall establish a system to review and monitor the activities related to bio-medical waste management by forming a new committee and the Committee shall meet once in every six months and the record of the minutes of the meetings of the committee shall be submitted along with the annual report to the prescribed authority.		complied
14	It is the responsibility of the occupier of the HCF that the only segregated bio-medical waste as per the Schedule-I of the BMW Management Rules, 2016 shall be handed over to common biomedical waste treatment facility for treatment, processing and final disposal.		complied
15	It shall be ensured that no untreated bio-medical waste shall be mixed with other wastes.		complied

  
12/6/24

  
12/6/24



Sl No	Conditions	Action plan	Remarks
16	The bio-medical waste shall be segregated into containers or bags at the point of generation in accordance with Schedule I of the BMW Management Rules, 2016 prior to its storage, transportation, treatment and disposal.		complied
17	The containers or bags referred to in sub-rule (2) shall be labelled as specified in Schedule IV of the BMW Management Rules, 2016. The bar code and global positioning system shall be added by the Occupier and common bio-medical waste treatment facility in one year time		complied
18	Untreated human anatomical waste, animal anatomical waste, soiled waste and biotechnology waste shall not be stored beyond a period of forty-eight hours: Provided that in case for any reason it becomes necessary to store such waste beyond such a period, the occupier shall take appropriate measures to ensure that the waste does not adversely affect human health and the environment and inform the prescribed authority along with the reasons for doing so.		complied
19	Dead Fetus below the viability period (as per the Medical Termination of Pregnancy Act 1971, amended from time to time) can be considered as human anatomical waste. Such waste should be handed over to the operator of common bio-medical waste treatment and disposal facility in yellow bag with a copy of the official Medical Termination of Pregnancy certificate from the Obstetrician or the medical superintendent of hospital or health care establishment.		Not applicable
20	Cytotoxic drug vials shall not be handed over to unauthorized person under any circumstances. These shall be sent back to the manufactures for necessary disposal at a single point. As a second option, these may be sent for incineration at common bio-medical waste treatment and disposal facility or TSDFs or plasma pyrolysis at temperature $>1200^{\circ}\text{C}$ .		complied
21	Residual or discarded chemical wastes, used or discarded disinfectants and chemical sludge can be disposed at hazardous waste treatment, storage and disposal facility. In such case, the waste should be sent to hazardous waste treatment, storage and disposal facility through operator of common bio-medical waste treatment and disposal facility only		complied
22	On-site pre-treatment of laboratory waste, microbiological waste, blood samples, blood bags should be disinfected or sterilized as per the Guidelines of World Health Organization or National AIDS Control Organization and then given to the common bio-medical waste treatment and disposal facility.		complied

*[Handwritten signature]*  
12/6/24

*[Handwritten signature]*  
12/6/24



Sl. No	Conditions	Action plan	Remarks
23	Syringes should be either mutilated or needles should be cut and or stored in tamper proof, leak proof and puncture proof containers for sharps storage		complied
24	The HCF shall maintain records related to the generation, collection, storage, transportation, treatment, disposal or any other form of handling of bio-medical waste		complied
25	The HCF shall submit an Annual Report to the prescribed authority (TNPCB) in Form-IV, on or before the 30th June of every year for the period from January to December of the preceding year.		complied
26	The HCF shall make available the annual report on its web-site within a period of two years from the date of publication of Bio-Medical Waste management (Amendment) Rules, 2018.		complied
27	In case of any change in the bio-medical waste generation, handling, treatment and disposal for which authorization was earlier granted, the occupier or operator of HCF shall intimate to the prescribed authority about the change or variation in the activity and shall submit a fresh application in Form II for modification of the conditions of Authorization.	Shall act accordingly	
28	In case of any major accident at any institution of HCF facility or any other site while handling biomedical waste, the authorized person shall intimate immediately to the prescribed authority about such accident and forward a report within twenty-four hours in writing regarding the remedial steps taken in Form I.	Shall act accordingly	
29	The HCF shall ensure occupational safety of all its health care workers and others involved in handling of bio-medical waste by providing appropriate and adequate personal protective equipments.		complied
30	The occupier of the HCF or an operator of a common bio-medical waste treatment facility shall be liable for all the damages caused to the environment or the public due to improper handling of bio- medical wastes. The occupier or operator of common bio-medical waste treatment facility shall be liable for action under section 5 and section 15 of the Act, in case of any violation.		Agreed
31	The HCF shall adopt the following treatment and disposal methods as described in the BMW Management Rules, 2016 i. Chemical treatment using at least 1% to 2% Sodium Hypochlorite having 30% residual chlorine for twenty minutes or any other equivalent chemical reagent that should demonstrate Log104 reduction efficiency for microorganisms as given in Schedule- III. ii. Mutilation or shredding must be to an extent to prevent unauthorized reuse.		complied

1) Shri.S.Jayachand

2) Dr.T.Raja

3) K.G.Deepesh



आईआरईएल (इंडिया) लिमिटेड  
IREL (India) Limited  
मणवालकुरिच्ची / Manavalakurichi

Minutes of the Bio-Medical Waste Management Committee meeting held on 05-12-2024.

Members attended

1. Shri.S.Jayachand DGM-Technical (Mining)-Chairman
2. Dr.T.Raja Manager-Medical – Convenor
3. Shri.K.G.Deepesh, Manager-Technical (Mining)-Member

Sl No	Conditions	Action plan	Remarks
1	All the provisions of the Bio-Medical Waste Management Rules, 2016 must be complied with.		complied
2	The HCF shall take all necessary steps to ensure that bio-medical waste is handled without any adverse effect to human health and the environment and in accordance with the Bio-Medical Waste (BMW) Management Rules, 2016.	Daily monitoring done	
3	The HCF shall make a provision within the premises for a safe, ventilated and secured location for storage of segregated biomedical waste in colored bags or containers in the manner as specified in Schedule I of the BMW Rules, 2016. It shall be ensured that there shall be no secondary handling, pilferage of recyclables or inadvertent scattering or spillage by animals and the bio-medical waste from such place or premises shall be directly transported in the manner as prescribed in these rules to the common bio-medical waste treatment facility or for the appropriate treatment and disposal, as the case may be, in the manner as prescribed in Schedule I of the BMW Management Rules, 2016.	Segregated in colored bags and stored in safe location.	
4	The HCF shall pre-treat the laboratory waste, microbiological waste, blood samples and blood bags through disinfection or sterilization on-site in the manner as prescribed by the World Health Organization (WHO) guidelines on safe management of wastes from health care activities and WHO Blue Book, 2014 and then sent to the Common bio-medical waste treatment facility for final disposal.		complied
5	The HCF shall phase out use of chlorinated plastic bags (excluding blood bags) and gloves by 27 <sup>th</sup> March, 2019.		complied

*[Signature]*  
5/12/24

*[Signature]*  
5/12



Sl No	Conditions	Action plan	Remarks
6	The HCF shall dispose of solid waste other than bio-medical waste in accordance with the provisions of respective waste management rules made under the relevant laws and amended from time to time.		complied
7	The HCF shall not give treated bio-medical waste with municipal solid waste.		complied
8	The HCF shall establish a Bar-Code System for bags or containers containing bio-medical waste to be sent out of the premises or for the further treatment and disposal in accordance with the guidelines issued by the Central Pollution Control Board by 27 <sup>th</sup> March, 2019.		complied
9	The HCF shall ensure segregation of liquid chemical waste at source and also ensure pre-treatment or neutralization prior to mixing with other effluent generated from health care facilities.		complied
10	The HCF shall ensure treatment and disposal of liquid waste in accordance with the Water(Prevention and Control of Pollution) Act, 1974(6 of 1974).		complied
11	The HCF shall maintain and update on day to day basis the bio-medical waste management register and display the monthly record on its website according to the bio-medical waste generated in terms of category and colour coding as specified in Schedule I of the BMW Management Rules, 2016.	Displayed in IREL website.	
12	The HCF shall inform to TNPCB immediately in case the operator of a CBMWTF does not collect the bio-medical waste within the intended time or as per the agreed time.	Shall inform in such case.	
13	The HCF shall establish a system to review and monitor the activities related to bio-medical waste management by forming a new committee and the Committee shall meet once in every six months and the record of the minutes of the meetings of the committee shall be submitted along with the annual report to the prescribed authority.		complied
14	It is the responsibility of the occupier of the HCF that the only segregated bio-medical waste as per the Schedule-I of the BMW Management Rules, 2016 shall be handed over to common biomedical waste treatment facility for treatment, processing and final disposal.		complied
15	It shall be ensured that no untreated bio-medical waste shall be mixed with other wastes.		complied
16	The bio-medical waste shall be segregated into containers or bags at the point of generation in accordance with Schedule I of the BMW Management Rules, 2016 prior to its storage, transportation, treatment and disposal.		complied

*C. J.*  
5/12/24

*[Signature]*  
5/12/24



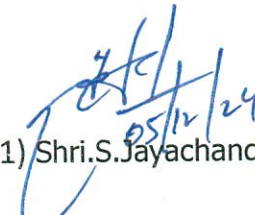
Sl No	Conditions	Action plan	Remarks
17	The containers or bags referred to in sub-rule (2) shall be labelled as specified in Schedule IV of the BMW Management Rules, 2016. The bar code and global positioning system shall be added by the Occupier and common bio-medical waste treatment facility in one year time		complied
18	Untreated human anatomical waste, animal anatomical waste, soiled waste and biotechnology waste shall not be stored beyond a period of forty-eight hours: Provided that in case for any reason it becomes necessary to store such waste beyond such a period, the occupier shall take appropriate measures to ensure that the waste does not adversely affect human health and the environment and inform the prescribed authority along with the reasons for doing so.		complied
19	Dead Fetus below the viability period (as per the Medical Termination of Pregnancy Act 1971, amended from time to time) can be considered as human anatomical waste. Such waste should be handed over to the operator of common bio-medical waste treatment and disposal facility in yellow bag with a copy of the official Medical Termination of Pregnancy certificate from the Obstetrician or the medical superintendent of hospital or health care establishment.		Not applicable
20	Cytotoxic drug vials shall not be handed over to unauthorized person under any circumstances. These shall be sent back to the manufactures for necessary disposal at a single point. As a second option, these may be sent for incineration at common bio-medical waste treatment and disposal facility or TSDFs or plasma pyrolysis at temperature $>1200^{\circ}\text{C}$ .		complied
21	Residual or discarded chemical wastes, used or discarded disinfectants and chemical sludge can be disposed at hazardous waste treatment, storage and disposal facility. In such case, the waste should be sent to hazardous waste treatment, storage and disposal facility through operator of common bio-medical waste treatment and disposal facility only		complied
22	On-site pre-treatment of laboratory waste, microbiological waste, blood samples, blood bags should be disinfected or sterilized as per the Guidelines of World Health Organization or National AIDS Control Organization and then given to the common bio-medical waste treatment and disposal facility.		complied
23	Syringes should be either mutilated or needles should be cut and or stored in tamper proof, leak proof and puncture proof containers for sharps storage		complied
24	The HCF shall maintain records related to the generation, collection, storage, transportation, treatment, disposal or any other form of handling of bio-medical waste		complied

*E. P. Srin.*  
5/12/24

*[Signature]*  
5/12/24



Sl. No	Conditions	Action plan	Remarks
25	The HCF shall submit an Annual Report to the prescribed authority (TNPCB) in Form-IV, on or before the 30th June of every year for the period from January to December of the preceding year.		complied
26	The HCF shall make available the annual report on its web-site within a period of two years from the date of publication of Bio-Medical Waste management (Amendment) Rules, 2018.		complied
27	In case of any change in the bio-medical waste generation, handling, treatment and disposal for which authorization was earlier granted, the occupier or operator of HCF shall intimate to the prescribed authority about the change or variation in the activity and shall submit a fresh application in Form II for modification of the conditions of Authorization.	Shall act accordingly	
28	In case of any major accident at any institution of HCF facility or any other site while handling biomedical waste, the authorized person shall intimate immediately to the prescribed authority about such accident and forward a report within twenty-four hours in writing regarding the remedial steps taken in Form I.	Shall act accordingly	
29	The HCF shall ensure occupational safety of all its health care workers and others involved in handling of bio-medical waste by providing appropriate and adequate personal protective equipments.		complied
30	The occupier of the HCF or an operator of a common bio-medical waste treatment facility shall be liable for all the damages caused to the environment or the public due to improper handling of bio- medical wastes. The occupier or operator of common bio-medical waste treatment facility shall be liable for action under section 5 and section 15 of the Act, in case of any violation.		Agreed
31	The HCF shall adopt the following treatment and disposal methods as described in the BMW Management Rules, 2016 i. Chemical treatment using at least 1% to 2% Sodium Hypochlorite having 30% residual chlorine for twenty minutes or any other equivalent chemical reagent that should demonstrate Log104 reduction efficiency for microorganisms as given in Schedule- III. ii. Mutilation or shredding must be to an extent to prevent unauthorized reuse.		complied

  
1) Shri. S. Jayachand

  
2) Dr. T. Raja

  
3) K. G. Deepesh