

# Management of the various types of degradable and non-degradable waste

## **Waste Management systems of the college:**

Waste management system involves a multi prolonged approach to reduce waste, to compose degradable waste and dispose the non-degradable waste. This includes practices like waste segregation, composting and awareness campaigns to educate students and staff about responsible waste disposal.

College did some agreements with agencies for waste disposals. The college has also constituted the 'Green Audit and environmental audit committee' to look after the solid, liquid and e-waste management and other environmental issues. The committee sets out to identify the types of wastes, category of waste generators, how to collect, handle and dispose wastes.

## **Steps of waste management**

### ➤ **Survey of waste:**

A waste survey is a comprehensive assessment of the types, quantities and sources of waste generated in a college campus.

### ➤ **Sources of Wastes from where waste generates:**

The committee has prepared a list of places from where the wastes are generated in the campus.

1. Principal office
2. Administrative Office
3. Library building
4. Seminar Halls and Students Classrooms
5. Indoor sports hall cum Auditorium
6. College Canteen
7. Girls Hostel
8. Dining Halls
9. Hostel Kitchen
10. Hostel Grocery Stores Room / Crockery Store Room

11. Health Centre
12. Play Ground
13. Various Departments
14. Laboratories.

➤ **Types of Wastes and existing practice of waste disposal**

After finding the places from where waste is generated, the next step is to dispose the different types of wastes (wet, dry and hazardous waste) as per the plan mentioned in the table below.

Type of waste	Disposed at common waste bins Municipality use it for composting	Dumped in road side, and street corners / vacant plots	Send to Waste Pickers for recycling
<b>Wet Waste – Degradable Waste</b>			
Vegetable peels	✓		
Fruit peels	✓		
Rotten fruits and vegetables	✓		
Leftover food	✓		
Used tea / tea bags	✓		
Used coffee ground	✓		
Egg shells	✓		
Expired other food items	✓		
Mango kernel & any seed		✓	
Coconut fibre	✓		
Used flowers / dry flowers	✓		
Spoiled spices	✓		
Floor sweeping dust	✓		
Garden shrubs	✓		
<b>Dry Waste – Non-degradable waste</b>			
Soap covers / pockets / sachets	✓		
Empty shampoo bottles, Empty perfume bottles / containers of deodorants / shaving creams	✓		✓
Empty Chemical Bottles			✓
Milk covers	✓		✓
Used door mats/door mats			✓
Used tooth brush			
Chocolate wrappers	✓		
Butter wrappers	✓		
Used mop cloth	✓		
Ghee / oil pockets / cans			✓
Package / polythene covers / Plastic covers			✓
Newspapers / card boards			✓
cosmetics containers			✓
Styrofoam			
Broken stationery like used pens, pencil sharpener			✓
Empty cans of floor cleaners			✓

Kurkure / Lays packets	✓		
Sachets (of shampoo, creams etc.)	✓		
Bisleri kind of water bottles			✓
Used tooth paste tubes etc.	✓		
Metal tins, and cans (e.g Pepsi Coke cans)			✓
Small tubs like the ones used for yogurt, cheese, jam			✓
<b>Hazardous Waste</b>			
Mosquito repellent refill bottles/ Mosquito repellent mats			✓
Expired medicines		✓	
Tablet covers / Syrups bottles			✓
Any medical discard		✓	
Sanitary napkins	✓		
Children's diapers	✓		
Used razor / razor blades	✓		
Old batteries			✓
Fused bulbs / tubes / electrical items	✓		✓
Broken glasses / ceramics	✓		✓
Empty cans of toilet cleaners			✓
Expired cosmetics		✓	
Cockroach killers / spray cans			✓
Old printer cartridge / CDs	✓		✓
Waste generated at Laboratories after proper treatment		✓	
Old Electronic items / parts			✓
Pieces of wires, old chargers, old pen drives	✓		✓

➤ **List of e-waste: Non-degradable waste:**

1. CD/DVDs
2. Pen drives
3. Cables / Wires
4. External drives
5. Modems
6. GPS units
7. Thermostat flasks
8. Calculators
9. Dry cell batteries
10. Electronic scrap parts
11. Mouse / Key board such items
12. Speakers
13. PCs
14. Laptops
15. Printers
16. Air-conditioners
17. Freezers
18. Digital Thermostats
19. Fluorescent Lamps and tubes
20. Incandescent Light bulbs.

### **Solid Waste Management:**

Wet Waste especially from kitchen & girls' hostel such as vegetable refuses, food scraps etc. are collected & Transported to **Vermicomposting plant'** for composting.

Basic principles of Dry Waste Management are 4Rs: Refuse, Reduce, Reuse & Recycle: Some waste is transported to the Municipal Corporation Beed for deposition as per agreement.

**Segregation at source:** Store biodegradable and non-biodegradable solid waste in different bins. Segregated solid waste being sent to Municipal corporation of Beed as we have a collaboration for the treatment of solid waste.

### **Degradable waste is Vermi compost plant**





Beed, Maharashtra, India  
 XQP2+H3X, Datta Nagar, Beed, Maharashtra 431122, India  
 Lat 18.986343°  
 Long 75.750203°  
 16/03/24 10:56 AM GMT +05:30



Google

GPS Map Camera



Beed, Maharashtra, India  
 XQP2+H3X, Datta Nagar, Beed, Maharashtra 431122, India  
 Lat 18.98638°  
 Long 75.750194°  
 16/03/24 10:57 AM GMT +05:30



Google

GPS Map Camera



## Solid waste collection pots and dustbins













Navgan Shikshan Sanstha Rajuri (N.)

**Mrs. Kesharbai Sonajirao Kshirsagar Alias Kaku**  
**Arts, Sci. & Comm. College, Beed-431122**

Principal  
Dr. S.V. Kshirsagar



ISO- 21001:2018



NAAC reaccredited -A Grade  
[ 3.18 CGPA as per New RAF ]



Green audit

Secretary  
Dr. Bharatbhushan  
Kshirsagar

COLLEGE HTE SEVERTH ID- 06310100113

Website- kskcollegebeed.com E-mail- kskbeed123@rediffmail.com Ph.(02442)222641 Fax-02442)230197

Ref : kskcb/2023-2024 / 196

Date :- 14 / 08 / 2023

To,  
The Hon'ble Chief Officer  
Beed Municipal Council,  
Beed- 431122.  
( Cleanliness Department)

Sub :- Regarding the disposal of solid Wastes from our  
college campus.

Respected Madam / Sir,

With reference to above cited subject, I would like to request you to college the solid waste of various departments and open spaces, drainage waste, from our college campus to dispose it properly and frequently as follows.

- 1) To collect & dispose the Garbage from east parking zone of college.
- 2) To clean & collect Drainage material ,sewage semi-solid material.
- 3) To collect & dispose properly Trees & plants leaves, solid garbage, branches of Trees etc.
- 4) To collect and dispose plastic bottles, carry-bags & other wastes from campus.
- 5) Spreading of fumigation & B.H.C. powder in and around college campus.

As per above information we are in need of help of cleanliness Department of Beed Municipal council Beed & cleanliness committee of our college for smooth work of the same from today to 5 years contract/ agreement with both offices & frequently visit of sanitary inspector and labours to the college for cleanliness is expected from municipal council, Beed.

Kindly do the needful in this regard and cooperate us for the same.

Thanking you,



  
Principal.  
**Principal**  
Mrs. K. S. K. Art's Sci. Comm.  
College, Beed-431122

English letter Page No.66







### Liquid waste Method:

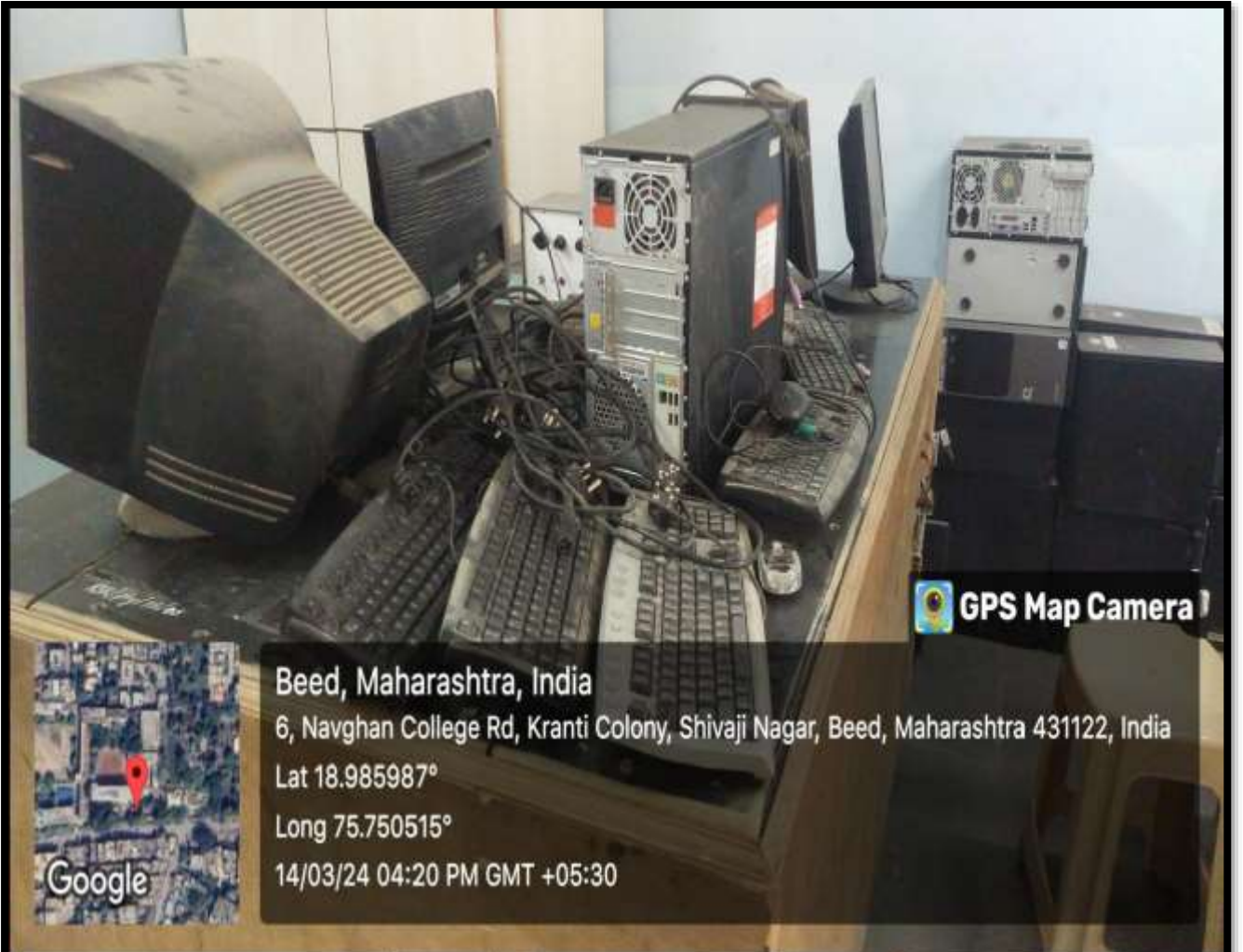
Liquid waste is appropriately treated for minimizing its toxicity before being discharged into the sewer systems or dumped into land pit or burn it. Liquid waste is treated with chemical disinfectants, neutralized with appropriate reagents then flushed into the sewage system. Thus, liquid waste management includes procedures and practices that prevent discharge of untreated pollutants to the drainage system or to water bodies as a result of the creation, collection, and disposal of non-hazardous liquid wastes. Within a college campus, we have waste water treatment plant. After treatment, water is used to wash floors and other cleaning purposes.



## E-waste Management:

Designate a room in the Campus which may be called 'Material Recovery Centre' (MRC). The discarded e-wastes from all the office blocks in the campus shall be sent to the MRC, and stored there until it is sent to e-waste recyclers. Electronic-waste from office can be discarded in two ways. One way is Extended Producer Responsibility (EPR). Under EPR manufacturers of computers, and other electronic items should take back end-of-life products. If some Producers / manufacturers want to appoint a 'Producer Responsibility Organization', which - on behalf of manufacturers - collect, dismantle and recycle end-of-life products can do so. Institution is used such facility for the disposal of e-waste. The idea is demanding the producers to take back e-waste through the same channel they used for placing a products in customers hands.

	Navgan Shikshan Sanstha Rajuri (N.)			
<b>Mrs.Kesharbai Sonajirao Kshirsagar Alias Kaku</b>				
<b>Arts,Sci.&amp; Comm.College,Beed-431122</b>				
<b>Principal</b> Dr.S.V.Kshirsagar	 ISO- 21001:2018	 NAAC reaccredited -A Grade [ 3.18 CGPA as per New RAF]	 Green audit	<b>Secretary</b> Dr.Bharatbhushan Kshirsagar
<b>COLLEGE HTE SEVERTH ID- 06310100113</b>				
Website-kskcollegebeed.com E-mail-kskbeed123@rediffmail.com Ph.(02442)222641 Fax-02442)230197				
Date :- 20 /07 / 2022				
<b>Memorandum of Understanding for e-waste management</b> Between <b>Department of Computer Science</b> <b>Mrs.Kesharbai Sonajirao Kshirsagar Alias Kaku Arts, Science and Commerce College,Beed</b> And <b>P.C.Care,Beed</b>				
This Memorandum of Understanding (MOU) sets for the terms and understanding between department of Computer Science of Mrs.Kesharbai Sonajirao Kshirsagar Alias Kaku Arts, Science and Commerce College, Beed and P.C.Care Beed Tq.& Dist.Beed to work together for furthering co-operation, education & research in common interests of two institutions.				
<b>Purpose:</b> Both Department jointly agree in order to promote the following activities. Our institution buys electronic products and computers from yours shop/ Concern on extended procedure responsibility ( EPR). As per EPR, it is supposed that at the end product life, the supplier should take back the goods under the disposal of <u>e-waste management.</u>				
<b>Duration :</b> This MOU is at- will and may be modified by mutual consent of authorized officials from both department. This MOU shall become effective upon signature by the authorized officials from the department of Computer Science of Mrs.Kesharbai Sonajirao Kshirsagar Alias Kaku Arts, Science and Commerce College,Beed and P.C.Care ,Beed Tq.& Dist.Beed and will remain in effect until modified or terminated by any one of the partners by mutual consent.				
 Head Department of Computer Science Mrs.K.S.K.College,Beed				 Director P.C.Care,Beed Tq & Dist. Beed
 Principal Mrs.K.S.K.College,Beed <b>Principal</b> Mrs.K.S.K.Alias Kaku Arts, Science & Commerce College Beed-431122				



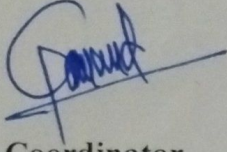


E. The college has made **chemical waste disposal** contract with the 'Champawati waste management', Beed for the disposal of hazardous chemical waste as per SOP.

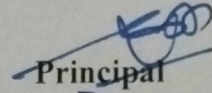




All the information given above are true. Hence certified.



**IQAC Coordinator**



**Principal**

**Principal**

**N.S.S.R.(N.) Mrs. Kesharbai  
Sonajirao Kshirsagar Alias Kaku  
Arts, Science and Commerce  
College, Beed.**