



# GREEN SCHOOLS PROGRAMME

## Responses for Green Schools Programme Audit 2016

**School Name:** Kendriya Vidyalaya Ordnance Factory  
Muradnagar

**Address:** Ordnance Factory, Muradnagar,  
Ghaziabad , Muradnagar, Ghaziabad,  
Uttar Pradesh, India

**Coordinator Name:** Sh. Narendra Kumar



AIR



ENERGY



FOOD



LAND



WATER



WASTE

Green Schools Programme

Centre for Science and Environment

41, Tughlakabad Institutional Area, New Delhi. India - 110062

Tel: +91-11 29955124, 29956110, 40616000

<http://www.greenschoolsprogramme.org/>

## SCHOOL PROFILE

1

**Name of the School / Institution**

Kendriya Vidyalaya Ordnance Factory Muradnagar

2

**Address**

Ordnance Factory, Muradnagar, Ghaziabad , Muradnagar, Ghaziabad, Uttar Pradesh, India

3

**Telephone Number (Landline Number with STD code)**

(ISD) 91 (STD) 1232 (NUMBER) 227237

4

**Mobile Number (Mobile Number with STD code)**

(ISD) 91 (Number) 9412219210

5

**Principal Name**

Asha Upadhyay

6

**GSP Coordinator Name**

Sh. Narendra Kumar

7

**GSP Coordinator Email**

panwarnaren@gmail.com

8

**GSP Coordinator Mobile Number**

(ISD)91 (Number) 9720314157

9

**Category Of The School**

Day Scholar

10

**School Shifts**

Morning

## GENERAL QUESTIONS

1 How many levels does your school have?

Lowest level of grade:1

Highest level of grade:12

2 Is your school single gender or mixed gender?

Mixed/Co-education

3 Which board of education does the school follow?

Central Board of Secondary Education

4 Total permanent population of the school

	Male	Female	Total
Students	893	691	1584
Teachers	15	35	50
Non-Teaching Staff	7	1	8
TOTAL	915	727	1642

4(b) How many visitors visit your school

10

5 What is the total number of working days of your school in a year?

210

6 Month(s) in which the GSP audit was carried out?

Nov

7 Where is the school located?

Urban Area



## AIR

### Task 1: Air Audit Team

#### Teachers

Sno.	Name	Email
1.	Mrs. Sushma Kashyap	Mrs. Sushma Kashyap
2.	Mrs. Madhu Paliwal	madhupaliwal2002@yahoo.in
3.	Mr. S. K. Tewatia	physk69@gmail.com

#### Administrative staff

Sno.	Name	Email
1.	Mr. Sumer Singh	kv_ofm@rediffmail.com

#### Students

Sno.	Name	Email	Grade/Class
1.	Khushbu	kv_ofm@rediffmail.com	12
2.	Gaurangi Katharya	kv_ofm@rediffmail.com	12
3.	Riya	kv_ofm@rediffmail.com	12
4.	Prashant	kv_ofm@rediffmail.com	12
5.	Akshita Malik	kv_ofm@rediffmail.com	12
6.	Swati	kv_ofm@rediffmail.com	12
7.	Shalu Rana	kv_ofm@rediffmail.com	12
8.	Sahil	kv_ofm@rediffmail.com	12
9.	Ayush	kv_ofm@rediffmail.com	12
10.	Pallavi	kv_ofm@rediffmail.com	12

### Task 2: Are the rooms in your school well-ventilated?

1 How many classrooms does your school have?

52

2 Window-floor ratio of classrooms in the school.

Details of the classroom  
(e.g. Class II section b)

$X = \text{Area of floor}$   
( $L \times B$ )

$Y = \text{Area of}$   
openings ( $L \times H$ )

Percentage of the floor area  
being ventilated ( $Y/X \times 100$ )

Class I-III	42.00	8.00	19.05
Class VI	48.00	9.00	18.75
Class VII	48.00	9.00	18.75
Class VIII	48.00	9.00	18.75
Class IX	48.00	9.00	18.75
Class X	48.00	9.00	18.75
Class XI	48.00	9.00	18.75
Class XII	48.00	9.00	18.75
Class IV	42.00	8.00	19.05
Class V	42.00	8.00	19.05
<b>TOTAL</b>	<b>462.00</b>	<b>87.00</b>	

### Task 3: How eco-friendly are the vehicles in your school?

3

What is the ownership used by the vehicles used in your school? Please choose what is applicable?

School does not use or own vehicles

### Task 4: How do you travel to school every day?

4

How many members of the school community use each type of transport:

	Students	Teaching Staff	Non Teaching Staff	Total
Schoool Bus	00	00	00	0
Public Bus	0	0	0	0
School Transport(Other than bus)	0	0	0	0
Public transport (other than bus, Metro, car pool)	244	6	2	252
Taxi four-wheeler	0	0	0	0
Taxi three-wheeler	40	00	1	41
Personal four-wheeler	00	9	0	9
Personal two-wheeler	00	7	1	8

Bicycle	490	6	3	499
On foot	500	22	1	523
Others (non-motorised)	310	0	0	310
SUB-TOTAL	1584	50	8	1642

### Task 5: How good is the air you breathe in your school?

5

How many students suffer from respiratory ailments ?

0

6

Does the school laboratory have air quality monitoring equipment?

No

No documents uploaded by the school.

6(a)

If No, is there an air quality monitoring station (private or government) close to your school?

Yes



## ENERGY

### Task 1: Energy Audit Team

#### Teachers

Sno.	Name	Email
1.	S.K. Tewatia	physk69@gmail.com
2.	Richa Mehta	kv_ofm@rediffmail.com

#### Administrative staff

Sno.	Name	Email
1.	Madhupaliwal	madhupaliwal2002@yahoo.in

#### Students

Sno.	Name	Email	Grade/Class
1.	Akshita Malik	kv_ofm@rediffmail.com	12
2.	Gaurangi Katharya	kv_ofm@rediffmail.com	12

### Task 2: How much energy does your school consume?

1 Does your school have access to an electricity bill?

No

No documents uploaded by the school.

2 Does your school have its own vehicles?

No

3 Provide the details of total energy consumed by the school

	Quantity consumed/monthly average	Energy consumed in Megajoules (MJ)	Type of use
Electricity from the board (kwh)	4800	17280.00	1,2,3,4,5
Electricity from generator (diesel) (litres)	0	0.00	0

Petrol (litres)	0	0.00	0
Diesel (litres)	0	0.00	0
CNG (kilogrammes)	0	0.00	0
Kerosene (litres)	0	0.00	0
Coal (kilogrammes)	0	0.00	0
Wood (kilogrammes)	0	0.00	0
Animal waste (kilogrammes)	0	0.00	0
Solar (kwh)	0	0.00	0
Wind (kwh)	0	0.00	0
LPG (kilogrammes)	14.2	732.72	5
Piped Natural Gas (kilogrammes)	0	0.00	0
<b>TOTAL</b>	<b>4814.20</b>	<b>18012.72</b>	

No documents uploaded by the school.

4

What appliances does your school have?

	Number	Size	BEE Star Rating
Air Conditioners	12	1.5	3
Refrigerator	1	165	3
Microwave	2	28	3
Tube Lights	260	40	0
CFL Bulbs	60	40	0
LED Lights	0	0	0
Fans	225	40	3

No documents uploaded by the school.

**Task 3: Is your school using any renewable sources of energy?**



5

What is the average number of sunny days in your area?

365

6

Are there any alternate sources of energy employed/ installed in your school?

No

No documents uploaded by the school for energy chapter.



## FOOD

### Task 1: Food Audit Team

#### Teachers

Sno.	Name	Email
1.	RICHA MEHTA	kv_ofm@rediffmail.com
2.	N.KUMAR	panwarnaren@gmail.com

#### Administrative staff

Sno.	Name	Email
1.	Sushma Kashyap	kv_ofm@rediffmail.com

#### Students

Sno.	Name	Email	Grade/Class
1.	Shalu Rana	kv_ofm@rediffmail.com	12
2.	Nehal	kv_ofm@rediffmail.com	11
3.	Raj Laxmi	kv_ofm@rediffmail.com	11
4.	Ritika Raj	kv_ofm@rediffmail.com	11
5.	Soumya	kv_ofm@rediffmail.com	11

### Task 2: Find out about the food service in your school.

1 Does your school have a provision/space to sell packaged food items within the campus

Yes

2 Does your school serve midday meals?

No

2(a) Do students bring their own lunch from home?

Yes

#### Supporting Documents

1. 20161110\_111215.jpg

2(a)(1)

How many students out of total student population bring home-made lunch?

1584.00

2(a)(2)

Of the students who bring lunch from home, how many bring packaged food?

1584.00

2(a)(3)

Do teachers have the responsibility to ensure that students are carrying lunch from home?

Yes

### Task 3: What kind of food is served/sold in your school

3

What kind of food is being served / sold in your school

	Please count all flavours/variants available in the school canteen separately	Total number of items sold in a month in the canteen	Month the food items were sold in
Savoury snacks and similar packaged food like chips, Kurkure, Cheetos, potato crisps, corn snacks, nuts and seeds, etc	5	300	10
Instant Noodles like Knorr, Cup-a-noodles, Top Ramen, Wai-wai, Yippee, Foodles, Maggi, etc	0	0	0
Potato fries and Burgers	1	200	10
Confectionery items (chocolate, candies, gums)	10	300	10
Ice-cream	0	0	0
Carbonated beverages	0	0	0
Sugar sweetened noncarbonated beverages	0	0	0
Packaged/Bottled Nimboo Paani/ Lassi/ Flavoured milk	0	0	0

Packaged/Bottled Energy Drinks	3	50	10
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### Supporting Documents

1. 20161110\_115658.jpg

4 Does your school serve traditional Indian snacks?

Yes

4(a) Please provide the details:

	Number of plates sold when on the menu
Samosas	150
Idli/vada and sambhar	0
Pav bhaji	0
Momos	0
Others	250

4(b) Give descriptions for rare local snacks served in your school:?

Nil

5 Does your school serve traditional Indian beverages?

No

### Task 4: What kind of food does your school promote?

6 Does the school distribute packaged food items as rewards during schools events?

Yes

6(a) Please provide details

Biscuits, Fruits, Fruit Juices, Ladoos

7 Does the school distribute chocolates/similar products as refreshments during schools events?

No

8 Are your school events such as quiz shows, talent shows, debates sponsored by food

companies/brands?

No

### Supporting Documents

1. 20161110\_115545.jpg



## LAND

### Task 1: Land Audit Team

#### Teachers

Sno.	Name	Email
1.	K.D. Shukla	kv_ofm@rediffmail.com

#### Administrative staff

Sno.	Name	Email
1.	Neeraj Kumar	neerajjalalabad.2002@gmail.com

#### Students

Sno.	Name	Email	Grade/Class
1.	Amandeep Chaudhary	kv_ofm@rediffmail.com	11
2.	Mayank Singh Baliyan	kv_ofm@rediffmail.com	11

### Task 2: Measure the four critical areas of your school campus

1

Complete the table:

	Your school's area
Site area in square meter (m2)	134,560
Ground coverage area	72,600
Green landscaped area on-ground	19,360
Surface parking area	3,200
Play area that is paved/ concrete on ground	6,800
Play area that has grass on ground	32,600
Service Area on ground	0
Roof and terrace area	72,600
Green cover on exposed roof & terrace	0
Total built up/constructed area	8,900

Total no. of floors	2
Others	0

### Task 3: Explore the number of species of plants and animals in your school

3

How many species of plants and animals exist in your school?

	Native	Exotic	Total
Plants	95	2	97
Animals	22	0	22

### Task 4: Find out if your school uses pesticides

4

Do you use chemical based pesticides in your school green cover?

No

#### Supporting Documents

1. 20160113\_130332.jpg
2. DSC01769.JPG
3. 20161111\_120924.jpg
4. 20161111\_121006.jpg



## WATER

### Task 1: Water Audit Team

#### Teachers

Sno.	Name	Email
1.	VINOD KUMAR	kv_ofm@rediffmail.com

#### Administrative staff

Sno.	Name	Email
1.	Neeraj	kv_ofm@rediffmail.com

#### Students

Sno.	Name	Email	Grade/Class
1.	Aayush Kumar	kv_ofm@rediffmail.com	12
2.	Indra Kumar	kv_ofm@rediffmail.com	12
3.	Kajal Punia	kv_ofm@rediffmail.com	12

### Task 2: How much water does your school use?

1

Calculate your school's water consumption, per activity.

Activity	Total Quantity (litres per day)
Drinking	1200
Toilet flushing	2000
Personal cleaning	1000
Washing clothes	0
Cooking	50
Cleaning Utensils	100
Washing Vegetables	50
Mopping floors	300
Gardening	500



Total	5200
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### Task 3: What are the sources, supply and storage of water in your school

2 Where does the water your school uses, come from?

Ground water

3 Who supplies the water in your school?

Municipality

4 Does your school get daily water supply?

Yes

4(a) If supply of water is daily, please tick the correct option

19-24 hours

### Task 4: What are the water conservation practices followed in your school?

5 What are the water conservation practices your school follows.

	Yes / No
Does your school have any water and sanitation policy?	Yes
If your school has an eco-club, do they have water component?	Yes
Do all tanks in the school have float valves installed to stop overflow?	Yes
Do the drinking water points have spill proof taps to check overflow?	Yes
Does your school use appliances with a quick-wash setting?	No
Are dual flush systems installed in the toilets?	Yes
Does your school encourage bottled water for drinking water?	Yes
Does your school grow local plant species which require limited amount of water to grow?	Yes
Has your school initiated any water conservation steps in the school or outside, in the past one year?	Yes
Does your school use a drip or irrigation system?	Yes
Any other step taken for water conservation? (if Yes, please specify)	No

## Supporting Documents

1. 20161111\_111848.jpg

### Task 5: Does your school harvest rainwater?

6

Do you have Rainwater harvesting (RWH) system in your school?

Yes

6(a)

Does your school harvest different catchments?.

Yes

6(a)(1)

Which is the catchment area being harvested by your school?

Paved

6(b)

How does your school harvest rainwater?

By storing

6(b)(1)

If your school only stores rainwater, please select the use of stored rainwater.

Gardening

6(b)(2)

Does your school have rainwater storage tank?

Yes

6(b)(2)(a)

Total capacity of storage tank (litres)

400.00

6(b)(2)(b)

Total number of storage tanks

1.00

6(b)(2)(c)

Location of tanks:

Semi underground

6(b)(2)(d)

Material options for tanks

Brick

6(c)

How much area in your school is harvested?

10 to 20 per cent

6(d)

Please select (from the list given below) the rainwater harvesting structures present in your

school

Storage tank

6(e)

Rate your catchment on cleanliness:

Good

### Supporting Documents

1. 20161111\_111848.jpg
2. 20161111\_113226.jpg

6(f)

Does your school clean your catchment and system (structure)?

Yes

6(f)(1)

Please specify when does your school clean the catchment and RWH system?

Do not follow any such pattern

6(g)

Does your school monitor the rainwater harvesting structure for its efficiency?

No

6(h)

What is the trend of groundwater level in your school across the year?

No change

6(i)

If your school's RWH structure is more than a year old, is there any improvement in the groundwater quality after the implementation of the RWH structure?

No

## Task 6: Are the plumbing and sanitation facilities in your school adequate?

7

Please share details about sanitation and hygiene practices in your school.

	Yes / No
Does the school have separate toilets for males and females?	Yes
Are there sufficient toilets for women in your school?	Yes
Are there sufficient toilets for men in your school?	Yes
Are the toilets accessible and safe to use for children?	Yes
Are the toilets accessible and safe to use for differently abled children?	Yes

Are the toilets accessible and safe to use for differently abled staff (teaching and non-teaching)?	Yes
Are the toilets situated in the right location in terms of privacy and safety?	Yes
Is there sufficient light during day time?	Yes

8 How many drinking water taps do you have?

16

9 How many hand pumps do you have?

0

10 How many ablution taps (taps used for washing hands only) do you have?

15

11 How many water closets (used for defecation and urination) do you have?.

	Girls	Boys	Common	Total
Number of toilets	24	20	0	44

12 How many urinals (strictly used for urination only) do you have?

44

13 How many other water outlets (example: taps in play fields, sprinklers, swimming pool) do you have?

4

14 Is there a water storage system in place to supply water in the toilets?

Yes

15 Is the water supply sufficient?

Yes

16 Are the toilets cleaned?

Yes

16(a) If yes, please specify

Twice a day

## Task 7: Does your school reuse/recycle waste water?

17

Does your school treat wastewater?

No

18

Does your school reuse the treated wastewater?

No

18(a)

Please specify the fate of wastewater

Used for gardening and horticulture

### Supporting Documents

1. 20161111\_113804.jpg



## WASTE

### Task 1: Waste Audit Team

#### Teachers

Sno.	Name	Email
1.	S.K. Tewatia	physk69@gmail.com

#### Administrative staff

Sno.	Name	Email
1.	khushboo Agarwal	khushboo.agarwal2006@gmail.com
2.	Neeraj	kv_ofm@rediffmail.com

#### Students

Sno.	Name	Email	Grade/Class
1.	Kajal Punia	kv_ofm@rediffmail.com	12
2.	Aayush Rajniwal	kv_ofm@rediffmail.com	12

### Task 2: What is the waste segregation system in your school?

1 Does your school segregate solid waste?

Yes

1a Who segregates the waste at source?

1. Housekeeping (Sweeper)
2. Gardener

2 Waste collection points in your school.

	Total No. of collection points	No bin	One bin	Two bins (wet & dry)	Three bins or more
Classrooms	52	0	52	0	0
Playgrounds	6	0	6	0	0
Common area (e.g. reception, corridors)	2	0	2	0	0

Staffroom	2	0	0	2	0
Laboratory	8	0	0	5	3
Canteen	3	0	0	0	3
Clinic/ Sick room	2	0	2	0	0
Library	2	0	2	0	0
Toilets	5	0	5	0	0
Others	0	0	0	0	0
Total	82	0	69	7	6

### Supporting Documents

1. 20161111\_114339.jpg

## Task 3: How much waste does your school generate?

3

Determine the quantity of waste generated in your school. (in kilogram)

	Collection per month (Frequency may differ)
Garden/ horticulture waste	1500
Kitchen waste	20
Paper	100
Plastic	10
Wood, glass, metal, classroom furniture	20
E-waste	2
Biomedical waste	0
Sanitary waste	5
Construction and Demolition (C & D) waste	500
Hazardous waste	0
Total Generated Solid Waste (in kilogram)	2157

### Supporting Documents

1. DSC00335.JPG
2. 20161111\_111820.jpg

## Task 4: How much waste does your school recycle/treat?

4

Does your school recycle any generated waste?

Yes

4a

Please provide quantity of which is applicable. (in kilogram)

	Quantity
Garden/ horticulture waste	100
Kitchen waste	0
Paper	0
Plastic	0
Wood, glass, metal, classroom furniture	0
E-waste	0
Biomedical waste	0
Sanitary waste	0
Construction and Demolition (C & D) waste	0
Hazardous waste	0
Total (in kilogram)	100

5

Does your school have a composting facility?

Yes

### Supporting Documents

1. DSC00426.JPG
2. 20161111\_111848.jpg
3. 20161111\_111657.jpg



4. 20161111\_111317.jpg

5. 20161111\_111657.jpg

5a

What is the methodology used?

Natural composting without added microbes

5b

What is the quantity of compost that is generated per month(in kilogram)?

50.00

5c

What is the purpose of the compost that is generated per month?

For school garden

6

Does your school encourage students &amp; teachers to reuse textbooks?

Yes

7

Table to understand whether internal or external waste recycling procedures are applied to waste.

	Local kabadiwala (the scrap collector)	Authorised dealer	Dumped at a designated community site	Internal procedure
Paper (e.g., used notebooks, used examination paper, subscription newspaper and magazines)	✓	✗	✗	✗
Plastic (e.g. plastic bottles)	✓	✗	✗	✗
Horticultural waste	✗	✗	✗	✓
E-waste (e.g. broken, unusable computers)	✓	✗	✗	✗
Hazardous waste (e.g. diesel fuel, battery)	✓	✗	✗	✗
Wood,glass, metal scrap, other scrap	✓	✗	✗	✗
Biomedical waste (e.g. waste from Nurse's room in school, e.g. band-aids, syringe)	✗	✗	✓	✗

No documents uploaded by the school.

## Task 5: How does your school dispose waste?

8

What is the final destination for waste that is disposed of externally?

Designated dumping site (Dhalao)

No documents uploaded by the school.

9

Does your school burn waste?

Yes

No documents uploaded by the school.

9a

Where does your school burn waste?

Outside the school

9b

What kind of waste is being burnt/ incinerated?

Paper

10

Does your school have the following? If yes, please give the numbers.

	Total	Working conditions	Non-working condition
TVs	3	3	0
VCR or DVD players	0	0	0
Refrigerators and freezers	1	1	0
Washing machines	0	0	0
Air conditioners	12	12	0
Heaters	5	5	0
Microwaves	0	0	0
Ovens	2	2	0
Toasters	0	0	0
Electric Kettles	1	0	1
Personal computers (CPU, mouse, screen and keyboard included)	113	113	0

Laptop computer (CPU, mouse, screen and keyboard included)	1	1	0
Notebook computers	0	0	0
Notepad computers	0	0	0
Printers	10	10	0
Copying equipment (Photocopiers)	3	3	0
Projectors	13	13	0
Whiteboards	11	11	0
Electrical & electronic typewriters	0	0	0
Pocket & desk calculators	7	7	0
Fax machines	1	1	0
Telex	0	0	0
Telephones	4	4	0
Pay telephones	0	0	0
Mobiles	0	0	0
Answering systems	0	0	0

### Supporting Documents

1. DSC09033.JPG

11

Do you know that your E-waste can be collected by an authorised dealer or dismantler?

Yes

No documents uploaded by the school.

11a

Who collects your e-waste, when not in working condition?

Kabadiwalla/ Scrapdealer

## Task 6: School's initiatives

12

Does the school have a policy on waste?

Yes

Policy document

13

Are there awareness drives with regard to Reduce, Recycle and Reuse?

Yes

No documents uploaded by the school.

13a

What form do these awareness drives take?

As part of the curriculum , As part of extracurricular activities such as guest lectures , By the showcasing of posters and stickers

14

Is the study of the environment integrated into the curriculum?

Yes

No documents uploaded by the school.



## FEEDBACK

1

Has your school participated in the Green Schools Programme (GSP) Audit before?

Yes

1(a)

If yes, then in which year did your school first participate in the GSP Audit?

2015

1(b)

If yes, how many times have you done the audit?

1

2

Have teachers from your school participated in teacher interactive workshops organized by the GSP team?

No

3

Did you find the online information relevant to your environmental education activities?

Yes

4

Was the audit easy-to-understand and self-explanatory?

Yes

5

Did you understand the present format of the GSP?

Yes

6

Do you think your school will be a Green School (resource efficient) by 2019?

Yes

7

What would be the help required to make your school a Green School?

Training the teachers to understand the GSP in depth and giving opportunity to visit and communicate with schools and attending which are far ahead in this programme and attending workshop, if , any.

8

How would you rate the overall design of the audit?

Aspect	Good / Average /Bad
Content	Good
Distribution of time among tasks	Good

Sequencing of tasks	Good
Orientation for conducting tasks	Average

9

Would your school like to recommend any topic/s that you strongly feel should be added or deleted in the audit?

No

10

Could you finish all the tasks in given period of time online?

Yes

11

How many times did you contact the Green Schools Programme Team for guidance and counseling?

Once

12

Water being the focus this year, did you find the questionnaire in Water section helpful to make your school understand how to become water efficient?

Yes

13

Did your students enjoy doing the Water activities?

Yes

13(a)

How many students were involved in the activities?

40.00

### Checklist of uploaded documents

1. Photographs of lunch boxes
2. Picture of Canteen selling UPPF
3. Traditional food items sold in canteen
4. Pictures of Green Cover
5. Pictures of bio-pesticides
6. Pictures of dustbins in classroom showing segregation at source
7. Pictures of playground with more than two dustbins
8. Picture of types of solid waste generated
9. Pictures of recycling units - composting pit, paper recycling machine, selling paper to kabadiwala, recyclers, etc
10. Pictures of housekeeping staff disposing different types of solid waste
11. Pictures of burning waste
12. Pictures of Electronic items used by school and storage of non-working electronic items
13. Waste Policy
14. Pictures of various school initiatives e.g. rally, debate, street play, art competition, etc
15. Pictures of respective audit teams doing survey