



PROFESSIONAL COURSES MUST ADD TO DISPOSE OF THEIR WASTE PROPERLY

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Abstract

Developed and developing nation has three alarming challenges, which should be taken care properly before it is too late, these are -

- Bio-medical Waste-The professional must know how to handle their waste as bio-medical waste . If world-wide been properly managed than the world might have not faced the situation like Covid-19 (SARS-COV-1), Bird Flu (HSN1), Swine Flu (H1N1) and so on. The professional must know to keep them safe before other safety by managing their waste properly.
- Modern Warfare Waste - Modern warfare consist of Chemical Weapons, Biological weapons, as well as nuclear weapons, recent war of Russia-Ukraine, Israel -Philistine, Taliban Incidence of Afghanistan, ISIS- Syria, Iran-Iraq war, conflict and so on. These wars are not face to face War, more over Missile, Rocket, Bombs are used, which destroy the fertile land, greenery and the beautiful air index. The soldiers are responsible for doing the war but the citizens face the consequences, if the live bomb or bomb shell not properly taken care of. The professionals must know which kind of bomb or rocket is there and should be removed from the site for proper disposal, Police must take care of these warfare by which the air pollution must be taken care immediately.
- Space Garbage - The world is moving fast towards the digital world or we can say that now internet is a part of present life, means the satellite services . These Space satellite or Space research station has certain life span the time, and after the life time they become threat to the earth as in 1979, USA- Skylab accidentally fall on the earth, Tomorrow second incidence can also happen. These Space research organisations must educate their professional to handle such type of space garbage. By educating the professional with Space Garbage management, we can not only give beautiful path for their work but also play an important role for Green and Healthy earth to live.

Keywords

Skylab, NASA, D.U. , NATO. ISRO. UNOOSA.

INTRODUCTION

Waste or garbage is the substance discarded after primary use or is worthless, defective and are of no use. We can understand that the sources of Waste can be classified into 1. Industrial 2. Commercial 3. Domestic. 4. Agriculture . It can be disposed by 1. Landfill 2. Incineration 3. Waste consumption 4. Composting 5. Verme-composting.

Now the question is Do-we manage our garbage well? while depending on others will never get the hundred percent result. Only self-approach can assure it. It is better to do self than

depending on others. In our country India itself, there are nine Universities providing - Waste management courses. The bachelor and master degree on 1. Waste and Resource management 2. Population management and control 3. Environmental pollution 4. Environmental management.

These courses depicts that the Waste management or garbage management is a big challenge of today's society for healthy and peaceful life and it should not be kept on the other soldier. Bio-medical, Modern warfare and Space garbage does not

know the boundaries meaning there by these waste management are not the part of the state or Government (federal government). These wastes are threat to the Mankind across the world, So the all over the countries must come forward to solve the problem which are the boundaries less problem (across the world).

Is Garbage or Waste management the only government responsibility? -

The garbage or the waste created by self, I am first responsible to take care of it, but majority of time we put the wastes on the concern society or government to take care of it. If we make too late to manage the garbage the environment become more poisonous more toxic, Timely disposal of waste is essential for the society for healthy living, if not done in time can be a cause of Fungal, Bacterial or Viral Infections thus immediately should be taken care.

Now the private organisations are coming up to provide waste management properly beside the municipal corporation like so on. In other wards government services to the garbage management is not sufficient . Since we depend on others, there are two questions in our mind for waste management service, firstly we have to pay for it and secondly the accuracy is not sufficient as perfect.

Let us now take responsibility to manage our own wastes, we have noticed that when we depend on others the satisfactory level and amount will be at high risk, so why should not we move forward to manage our wastes by self-management, the satisfaction level and savings will be in our favour.

Let us now Educate our people at the first stage of waste handle, we have already seen that there are nine university providing education of waste management or pollution management in India, that means there is scope that big organisation should come up with their own planning with the help of education institutes to manage their garbage. Educate our professionals to make the world Clean & Green: -

We must educate our professional, many institutes are coming up but the problem are with different types of waste in particular the Hazardous or dangerous wastes . We will discuss only the above mentioned three categories of dangerous waste.

1. Bio-medical waste: - Newspaper The Hindu in Jan 2021 said with reference to Government Medical College, Kochi with Government state land monitoring committee (SLMC) to study waste disposal "Bio-medical waste mixed with food waste found dumped inputs, the state pollution control board (PCB) has submitted the report that state still a lot of steps to be taken for proper management of bio-medical Waste".

Wuhan Institute of Virology, China if properly handle or disposal the bio-medical waste the covid-19, pandemic may not have spread, we can say since these waste leak in virus or not properly disposed leads to the big problem of SARS-COV-1. The Inspection of the Wuhan Virology

Institute, which conducts research on the world's most dangerous disease - the origin of the Covid-19 pandemic. The sensitive mission, which China had delayed throughout the first year of the pandemic, has a remit to explore how the virus jumped from animal to human. WHO must take it as serious matter, why China has not co-operated on this issue.

Swine Flu or Swine Influenza (H1N1) virus started in pigs first recognised in 1919 and still a seasonal flu virus.

Bird Flu (H5N1) avian influenza virus primary infects birds but can also infect human. In 1996 first identified in domestic water fowl in Southern China. The matter of concern is that Bird flu and SARS-COV-1 virus spread from China that means Bio- medical wastes is not properly managed.

World Health Organisation (WHO) states that 85% of bio-medical wastes are non-hazardous and 15% are hazardous materials that may be infectious, toxic, or radio-active. Every year an estimated more than 16 billion injection are used with sharp needle - an alarming for AIDS or Hepatitis-B like situation .

The 20th Century worst pandemic 'Spanish Flu' erupted in March 1918 in Camp Funston (Kansas, US), much like Covid-19. It spread globally at an astonishing wave took about Three crores (30 million) lives in four months. The half of death occurred in India means 1.5 crores the cause of death is the Virus like Covid -19 Virus.

September 1994, plague struck Surat, a city in the state of Gujarat in western India the Pneumonic outbreak. Cholera, it has been said was the Chronic epidemic disease of nineteenth century. The epidemic of the 1830, 1840 and 1860 have been identified as causing popular unrest accentuating social conflict and providing a catalyst for Municipal reforms and the development of public health

International Committee of Red Cross (ICRC) has issued a book for the medical fraternity Medical Waste Management. There is a guide line provided by the red cross society for proper disposal of bio-medical waste . Here we have seen that International Red Cross Society is serious about this important issue but because the present facility is bio-medical waste management is not sufficient .

Now our request is each and every medical faculty must know their waste properly and understand the proper disposal. When each and every Institute become alert about their proper disposal of the waste than Bid flu or SARS Cov-1, Swine Flu, will not happen.

United Nations and WHO must assure that each and every country must follow the mankind related rules. Must call all the nations to come up that such incidence should not happen again. For this important issue International Red Cross Society should be the part of it.

2. Modern Warfare: - Now a days we witness the war between Russia- Ukraine, on other word NATO verses Russia, before the long battle of Iran-Iraq happened, Pakistan Invasion to Kargil, Syria - ISIS conflict, Israel - Philistine conflict has been witnessed in the 21st Century. Over all we have noted that War is an unwanted incidence, which one has to face, where all country become part of it.

When all developed or developing nations become part of it resulting all modern Rocket, Missiles, laser guided bomb, DU bomb or Biological Bombs. These modern Ammunitions are more dangerous than before.

My request is that the professional courses of armed forces must include and educate their forces, how to safe guard from the dangerous waste available at the battle field or we can say how to manage the warfare waste for the safety and healthy life of the citizen. In otherwords when the arms forces are involved in battle the local police should be educated to proper removal and disposal of the missile, rocket, shell etc.

Recently we have noted that only U.S. Armed forces has taken initiative to solve the garbage problem of Iran-Iraq war. The question is why only U.S.A, should do such a dangerous work after the war, why not each and every country develop their own forces to overcome with such an important Job. There another author said "Sitting at land fills of hazardous waste in Iraq from geological perspective" while reporting from Iraq. Timely removal of war waste is necessary to avoid as In Iraq, every living was dying, Iraq has never had a radioactive material disposal facility and the lack of a disposal facility because

D.U weapons was being used during war.

There is no proper strategy national or international program for cleaning D.U or advance weapons garbage. As Iraq war winds down U.S. Military clean up hazardous waste hundred barrel of Oil Filter, powerful chemical and hydrochloric acid or lithium batteries etc as per "Standard Environment Production Agency (EPA)" guidelines .

3. Space Garbage: - We all know that the space is the region beyond earth atmosphere at the Kamran line, currently defined as an altitude of 100 kilometre. Current Waste disposal method as the International Space Station relay on Astronauts manually processing trash by placing it in to bags, then loading it into a designated vehicle in short term storage, which depends on the craft return the trash to earth or burns up in the atmosphere. NASA seeks new ways to handle trash for deep space mission- regular cargo resupply mission delivers approximately 12 Metric ton of each year.

The US Space Laboratory SKYLAB -1, launched in 1973 which tremble back to earth in 1979, scattering

debris across the Southern Indian Ocean and sparsely populated western Australia. The 77.5 tons Skylab could break in 500 pieces.

The Waste created by Rocket or satellite or debris created by rocket launching, is free flowing in the space not only today, but also of tomorrow, it will create a threat to the other satellite too. Now the time has come to plan how to handle such garbage of space for free service of satellites.

In 1979 Skylab of US tumbles back to earth is not a first case as a big threat to the world peace and harmony. The way more and more satellite are being launched, such type of incidence may increase? therefore more threat to the earth for harmony.

According to the United Nation Office of Outer Space Affaire (UNOOSA), there are 11,330 individual satellite orbiting the earth at the end of June 2023 . This represents almost 40 % present increase since January 2022.

It is to be noted that among 11,330 only 7,702 active satellite in various earth orbit, then what about non-functional satellite the Waste?

When we consider India first ISRO launched Aryabhata in 1975. After nine-year gape in 3rd April 1984 Soyuz T-11, Indian cosmonaut Rakesh Sharma embarked with two Soviet Cosmonauts, however in the recent 10 ten years India has made the records of launching the Satellites.

Now the time has come to understand the Waste management of Space. The professional must plan to stop or minimise the garbage of space. No other than the expert can plan or educate themselves to make the earth safe and green.

CONCLUSION

We understand the government trying to solve the problem of waste management but the Success rate is not up to the mark, example we have seen in China of Covid-19 or Bird flu. The medical Waste is still a big challenge which includes AIDS or Hepatitis-B like viral problem. To solve it from the bottom-line health Professional must be educated to dispose their waste properly and in time. The guidelines of Red Cross Society can be shared for proper safety of the society world over. Big hospital or Institute must have their own Waste Management Unit, like recently all big Institute had their own Oxygen generating plant, not dependent on others.

WHO should come up with all the developing and developed nations to make a proper guideline for the Bio-medical Wastes and must inspect the research Centre of Virus, Bacteria or other Research Institute.

Modern Warfare are more dangerous because of its components like nuclear bomb, biological bomb or chemical bomb. Every country soldier must be given the knowledge, how to safe guard the society if attacked with nuclear

weapons by the enemy, we must not forget the incidence of Japan 1942, Hiroshima and Nagasaki disaster. The forces must not only diffuse the bomb but also permanent removal from there. As a sum-up armed forces around the world must put in the syllabus how to overcome with debris of nuclear weapons chemical weapons- biological weapons. To depend on one Country USA is not sufficient to the world.

China, India, United States, North Korea, Russia, have big armed forces along with France, Israel, United Kingdom and Russia have the most advance weapons. All these developed countries must come to gather under the umbrella of United Nations to solve the consequences after the Warfare wastes.

At Space, it is good that Astronauts manage their personal waste by putting it in a bag and taking it back to earth for disposal but the waste created by the Rocket is still in the space which is not good for the world over therefore the time has come to come forward and educate the researchers of space centre to work on it and try to solve the garbage of space. The Skylab created Panic world over, should not happen any more so take the step to collect the garbage and proper dispose by which Earth can remain the safe and healthy for the people. As a Sum-up, Space research Centre must add in their syllabus the present problem of space waste and do work to stop or remove or minimise it.

The United States, Japan, India, China, Israel, France, United Kingdom, Russia, South Korea have the capacity to send objects into orbit with their own space vehicle. Therefore, they must come together to look into the waste of Space in particular the Satellite non function and so on, must come forward to look into the space problem.

Life threatening tough waste and its management is not only a state policy matter, more over it is a job of Federal government or Central government. These mentioned field as Medical (Health), Modern warfare (Defence - Home) and Space (Space research) are more with Federal Government . Thus, the Central government must come forward to develop their professional to extend by which they can act fast and solve waste-garbage in time for better quality of and healthy life. Resulting better quality of Air index to survive and good soil or greenery or good crops to live on earth.

As Conclusion big institutes or professional must understand that their wastes are their responsibility and they must take care of proper disposal by educating their peoples, when

every professional take care of their waste certainly we will have good position by improving the global warming or environmental pollution.

Key word

D.U = Depicted Uranium.

NASA = National aeronautics and Space Administration, USA. ISRO = Indian Space Research Organisation.

Skylab = US Space laboratory,

NATO = North Atlantic Treaty Organisation.

UNOOSA = United Nation Office for Outer Space AFFAIRS.

REFERENCES

1. 2023 - www.springwise.com by Lisa Magloff, 'Making the space economy more sustainably by removing space junk'. (www.astroscale.com)
2. 2021 - www.insideclimatenews.org . by Lynzy Billing.
3. 2021 - www.france24.com by News Wires 'WHO inspector visit Wuhan Virus Lab at heart of Covid-19, conspiracy theories'.
4. 2021 - www.thehindu.com/news/cities .
5. 2020 - www.gatewayhouse.in by Sitra Lentin , 'The 1918 Flu - India's worst pandemic'. 2019 - www.diva.portal.org by Varanyam Sissakian .
6. 2018 - www.who.int/news-room/fact-sheet/details-healthcare-waste.
7. 2018 - www.nasa.gov-wastehandlingin-microgravityenvironment by leejay lockhrt (NASA). 2018 - www.nasa.gov-new-ways-to-handle-trash-for-space-mission by Erin Mahoney.
8. 2015 - www.researchgate.net by Sanja Kdamlure Croatia. 2014 - www.witpress.com by N Ali Ansari .
7. 2013 - www.intechopen.com by Nikeehi Chuka Nusohukurs. 'There is a great need for effective law on health care waste management should be established and be moved to an Act, The issue are to be treated as urgent and very critical by government.
8. 2012 - www.newsbbc.co.uk 2010 - www.csmonitor.com
9. 1995 - www.montania.edu by Dr Robert K D Peterson ' The Surat plaque and its after month' 1986 - www.jstor.org by David Arnold 'Cholera and Colonialism in British rule'.