



## CONSTRUCTION & DEMOLITION (C&D) WASTE MANAGEMENT AND UTILIZATION OF RECYCLED PRODUCTS: CHANDIGARH

### Project Highlights

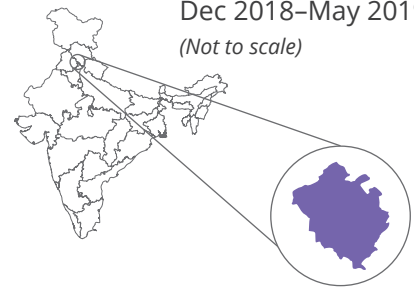
- Revision of the Disaster Management Plan to update all the information related to flood preparedness
- Mass awareness and extensive community engagement
- Adoption of city-wide flood precautionary measures

### Background

Govt. of India has notified CONSTRUCTION DEMOLITION WASTE MANAGEMENT RULE 2016 in which construction building material cement debris, stones etc. is to be reused after recycling. C&D waste should not be dumped in open spaces/landfills grounds without processing. To implement the same it should be made mandatory for the residence of the city that should send their plans for constructions/reconstruction before approval. They should be bounded by terms and conditions to reuse the recycle material. All the local Govt. Institutions should be bounded by terms and conditions to reuse the recycle material. They have directed to install C&D waste processing plant to recycle and reuse the material. Accordingly MC, Chandigarh has installed the C&D waste processing plant & as well as cement concrete products factory to use recycled aggregates by-products made by C&D waste should be made mandatory to be used in road Construction/building Construction etc. They also to be bound to dump their C&D waste at designed site/plant and dumping in unauthorized area result into punishable offense.

#### Industrial Area Phase I, Chandigarh

Dec 2018–May 2019  
(Not to scale)



### Project Objectives

- I. To develop a C&D waste processing unit in the industrial area of Chandigarh
- II. To comply to the waste policy of the local area of the city

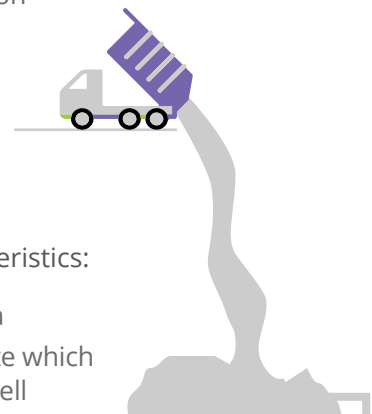
### Key Stakeholders

Municipal Corporation Chandigarh and Engineering Department, UT Administration

### Approach

Municipal Corporation Chandigarh has set up the construction and demolition waste processing plant in its industrial area for stacking, crushing, processing and manufacturing of various C&D products. The C&D plant has the following characteristics:

- It has been set up at a very low budget in comparison to other cities across India
- The plant has a capacity of about 150 MT per day for crushing construction waste which can further increase up to 180 MT/day and meet the demand of the Tri-city as well



- It produces material which can be utilized for cement concrete works such as washed sand, crushed aggregates of 10 mm,20 mm and 40 mm
- The plant also manufactures road material i.e., PCC kerbs, PCC Channel , PCC Tiles , Paver Block etc. at a relatively low cost
- The plant reduces the in house cost of construction by approximately up to 10% and has the tipping charges and processing cost at relatively lower costs than other cities in India
- It provides facility for the residents of Chandigarh to dump their construction waste in authorized manner

## Achievements



### Benefits

- Till date 5000 MT C&D waste has been processed into recycled products from the date of commissioning of plant i.e. 15th May 2019
- Natural Resource Savings due to development of recycled products
- Reduction in the quantum of waste reaching landfills
- Reduction in carbon footprints and hence yielding numerous environmental benefits

### Co-benefits

- Economic benefits, for instance in reduction of transportation costs of the construction materials
- Job creation

## Limitations

- Minimum land required for setting up C&D waste plant in Chandigarh is 3-4 acre
- In future stacking of recycled material need extra land
- General Awareness among residents of the city on C&D Waste Management

## Future Prospects

- Production of plant increases from 150 MT/day to 180 MT/day by increasing the working hours which will meet the demand of tricity (Chandigarh – Mohali- Panchkula)
- In long term manufacturing of public health related items like PCC Road Gully covers, PCC Manholes covers etc. is also planned
- For Horticulture works , manufacturing of PCC benches will also be taken up
- Preparation of ISO-9001 is in progress

Source: Case received from the city

For more Information

<https://www.tribuneindia.com/news/chandigarh/dumping-debris-to-cost-you-dear-in-chandigarh/738521.html>

<https://timesofindia.indiatimes.com/city/chandigarh/chandigarh-starts-to-gather-debris/articleshow/65650726.cms>

<https://www.tribuneindia.com/news/chandigarh/ut-civic-body-in-dock-over-c-d-waste-plant/793080.html>

