

**Refuse Storage and Collection
Building (Refuse Storage and Material Recovery Chambers
and Refuse Chutes) Regulations**

Access for Refuse Collection Vehicle

When planning the location of refuse storage and material recovery chambers (RS&MRC), and making arrangements for ready access thereto, the limiting specifications of refuse collection vehicles currently in use by the Food and Environmental Hygiene Department, taking the 'worst case' for planning purposes, are as follows:

- (a) Length **10.00 m**;
- (b) Width (including mirrors) **3.00 m**;
- (c) Height **3.80 m**;
- (d) Headroom required for bin-lifting operation **4.50 m**;
- (e) Ground clearance **0.22 m**;
- (f) Angle of departure (angle of rear projection, including bin-lifting device, above ground in relation to ground contact of rear wheels) **8 degrees**;
- (g) Turning circle **20.00 m**;
- (h) Gross vehicular weight **25 tonnes**;
- (i) Maximum gradient for access **1:10**;
- (j) Minimum width of access road **3.50 m**; and
- (k) Parking space for refuse collection operation **5.00 m x 12.00 m**.

2. Unless refuse collection vehicles can leave the area of a RS&MRC in a continuing forward direction, it may be necessary to provide basic 'hammer-head' turning facilities of **27.00 m x 9.50 m** with an approach **10.90 m** wide. Alternative measures may be designed based upon the limiting vehicle specifications provided above. Appendix A illustrates two alternative designs for general reference.

3. The planned refuse collection vehicle access and exit routes from a public street to the RS&MRC should be indicated on the building plans. RS&MRCs which are intended to be visited by refuse collection vehicles should be located on the ground floor or podium floor with direct vehicular access from the street without passing through intervening floors.

Building (Refuse Storage and Material Recovery Chambers and Refuse Chutes) Regulations

4. The Building (Refuse Storage and Material Recovery Chambers and Refuse Chutes) Regulations cover, inter alia, the provision of material recovery chambers (MRC), RS&MRC and refuse storage and material recovery rooms (RS&MRR) as well as the requirement on mechanical ventilation and air-purifying facilities for MRC, RS&MRC and RS&MRR.

5. The Building (Refuse Storage and Material Recovery Chambers and Refuse Chutes) (Amendment) Regulation 2008 (the 'Amendment Regulation') introduced a new regulation 3A on the mandatory requirement for the provision of a RS&MRR on every floor of new domestic buildings or the domestic part of new composite buildings, except in the circumstances as provided for in regulations 3A(2), (3), (4), (5) and (6). The Amendment Regulation will come into operation on 1 December 2008, and its application will be governed by the provisions of section 39(2) of the Buildings Ordinance.

Refuse Storage and Material Recovery Chambers, Material Recovery Chambers and Refuse Storage and Material Recovery Rooms

6. When submitting plans for buildings of the type referred to in the Schedule to Regulation 3 of the Building (Refuse Storage and Material Recovery Chambers and Refuse Chutes) Regulations, calculation showing the usable floor space or aggregate usable floor space, the minimum floor space for any chamber required, and the actual size of any proposed chamber should be provided.

7. Every RS&MRR should have adequate provisions for fire prevention and fire fighting such as fire alarm and sprinkler. The room should be separated from the remainder of the building by walls having a FRP of 2 hours and the access door thereto should have a FRP of 1 hour. The self-closing mechanism to the door should not permit the door to be held in the open position. Appendix B provides details of typical layouts and minimum dimensions for RS&MRR.

8. Subject to satisfactory planning, the area of RS&MRC, MRC, RS&MRR, refuse chutes and hopper rooms (where provided) may, under Building (Planning) Regulation 23(3)(b), be excluded from measurement in gross floor area calculations.

/Mechanical.....

Mechanical Ventilation and Air Purifying Facilities for Material Recovery Chambers, Refuse Storage and Material Recovery Chambers and Rooms

9. Where a centralised ventilation system is adopted, a single air purifier may be installed before final discharge into the atmosphere. Alternatively where there is no particular odour problem a mechanical fan coupled with a particulate filter at each RS&MRR/MRC may be considered.
10. The main exhaust outlet for a centralised ventilation system should be located at upper roof level away from other buildings. However in the case where the building is surrounded by taller buildings, the discharge may be located at the main RS&MRC.
11. The noise level of the system should conform with the Technical Memorandum published under the Noise Control Ordinance (Cap 400). Fire dampers should be provided if the system has exhaust grilles and ducting at each floor.
12. Air purifying devices such as chemical air scrubber, bio-oxygen generator, photo-oxidation generator or other appropriate devices should be provided within a RS&MRC.

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Building Authority

Ref. : BD GP/BREG/RC/1 (II)

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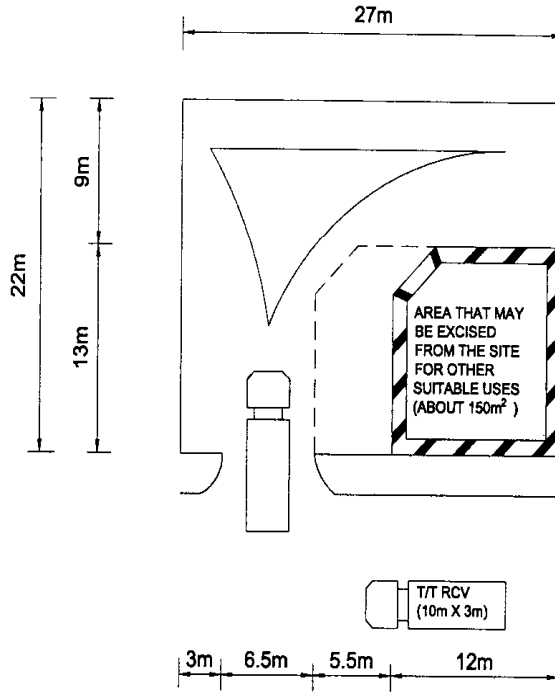
This revision August 2008 (AD/NB1) – Para. 5 added and paras. 4 & 6 amended

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IN URBAN AND NEW TOWN AREAS

**Appendix A
PNAP 98
APP-35**

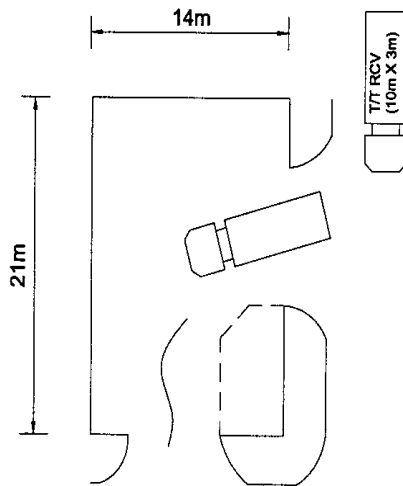
a)



GROSS SITE AREA : 594m²

**CLASS 'A' SITE FOR
CONVENTIONAL &
TRACTOR / TRAILER
RCV (HEAD IN / HEAD OUT)**

b)



GROSS SITE AREA : 294m²

**CLASS 'B/C' SITE FOR
CONVENTIONAL &
TRACTOR / TRAILER RCV
(HEAD IN / HEAD OUT)**

LEGEND:

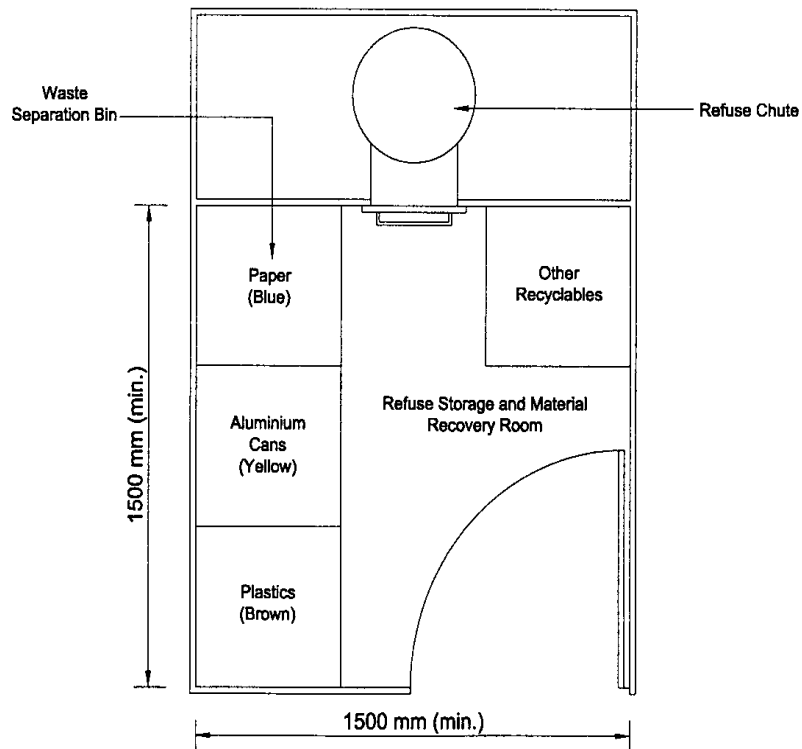
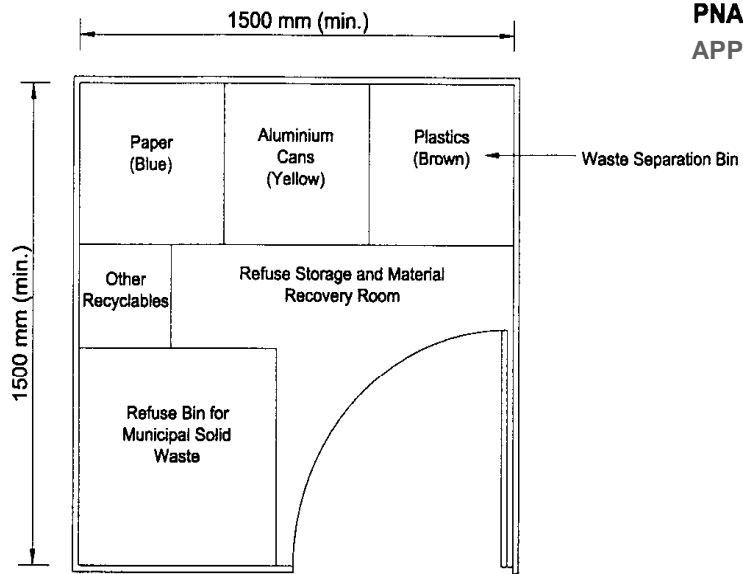
— AREA THAT MAY BE RESERVED FOR STORAGE AND OTHER ANCILLARY USES

T/T TRACTOR / TRAILER

RCV REFUSE COLLECTION VEHICLE

SCALE 1 : 400





Examples of Layout Plan for RS & MRR