



Verification Division
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NOTE BY THE SECRETARIAT

**CALCULATION OF RESIDUAL PRODUCTION CAPACITY OF
CHEMICAL WEAPONS PRODUCTION FACILITIES**

1. In accordance with paragraph 28 of Part V of the Verification Annex, the order of Chemical Weapons Production Facility (CWPF) destruction is based on the principle of levelling out, and takes into account the interests of States Parties for undiminished security during the destruction period.
2. In accordance with paragraph 30 of Part V of the Verification Annex, production capacity shall be used as the comparison factor for CWPFs that have produced Schedule 1 chemicals.
3. A decision of the First Session of the Conference of States Parties, (C-I/DEC/29, dated 16 May 1997), determined that the maximum permitted residual production capacity at the end of the eighth year after entry into force (EIF) would be 20% of the original production capacity, and that the permitted residual production capacity at the end of the three destruction periods would be as follows:

End of year 5 (29.04.2002)	60%
End of year 8 (29.04.2005)	20%
End of year 10 (29.04.2007)	0%
4. The following relative weighting factors, listed in Table 1, Table 2(a), Table 2(b), and Table 2(c), have been established to determine what production capacity and buildings/equipment have to be destroyed.

Table 1
Destruction of Chemical Weapons Production Facilities

Items to be Destroyed	Assigned Value
Specialised equipment	75%
Standard equipment	4%
Specialised buildings	16%
Standard buildings	5%

5. The following guidelines compare the weighting assigned to factors involved in the levelling out of production capacity:

Table 2(a)
Manufacturing and Filling Facilities

Items to be Destroyed	Value
The main production train, including any reactor or equipment for product synthesis, and any equipment used directly for heat transfer in the final technological stage	35%
Chemical weapons filling machines and loading equipment	35%
Specialised purification and separation equipment included in the main production train	15%
Other equipment specifically designed, built, or installed for the operation of the facility as a chemical weapons production facility, as distinct from a facility constructed according to prevailing commercial industrial standards	15%

Table 2(b)
Manufacturing Facilities

Items to be Destroyed	Value
The main production train, including any reactor or equipment for product synthesis, and any equipment used directly for heat transfer in the final technological stage	70%
Specialised purification and separation equipment included in the main production train	15%
Other equipment specifically designed, built, or installed for the operation of the facility as a chemical weapons production facility, as distinct from a facility constructed according to prevailing commercial industrial standards	15%

Table 2(c)
Filling Facilities

Items to be Destroyed	Value
Chemical weapons filling machines and loading equipment	85%
Other equipment specifically designed, built, or installed for the operation of the facility as a chemical weapons production facility, as distinct from a facility constructed according to prevailing commercial industrial standards	15%

6. The percentage values in Tables 2(a), 2(b) and 2(c) (which add up to 100%), equal 75% of the items of specialised equipment to be destroyed, as shown in Table 1 above.

7. In order to qualify for the given percentage reduction indicated in Tables 2(a), 2(b) and 2(c), all items within a given group must be destroyed.
8. The starting point for calculating the residual production capacity is the originally declared production capacity.
9. For equipment or buildings which the Secretariat determines to be specialised, and the State Party determines to be standard, the calculation of residual production capacity will be considered as “specialised”, until such time as the Executive Council shall determine otherwise.
10. In cases when there is an absence of a particular sub-type of specialised equipment, the percentage values for that sub-type of specialised equipment will be distributed amongst the remaining sub-groups. For example:
 - (a) Table 2(a). For instance, if no separate purification and separation equipment from the main production train has been specified in the declarations or in the inspection reports, all specialised equipment from the main production train, in this case, will have a 50% (35%+15%) value. In cases where there is no declaration or factual findings in the final inspection reports of “other specialised equipment”(15%), this value (15%) will be added to the value of the main production train, equalling 65% (35%+15%+15%); and
 - (b) Table 1. In cases where there is no declaration, or where there are no factual findings in the final inspection reports of specialised buildings, the value for all existing buildings will be 21% (16%+5%).
11. The total production capacity for a manufacturing and filling facility will be the sum of the declared production and filling capacities:
 - (a) in cases where several chemicals were manufactured, the production capacity will be summarised; and
 - (b) in cases where several types of munitions or containers were filled, the highest filling capacity will be used as the basic filling capacity for the distribution percentage amongst the total number of filling equipment items.
12. For facilities whose residual EIF production capacity was not declared or not clarified by a State Party, the Secretariat will estimate the approximate EIF production capacity, based upon available process diagrams or, in the case of their absence, based upon the type of process used at the facility. The estimations will be made in close consultations with the States Parties concerned, and the final figures established by the Secretariat will be communicated to those States Parties.
13. The residual production capacity for the facilities to be destroyed will be calculated on the basis of the relative weightings of Tables 1 and 2(a), 2(b), and 2(c).

14. The residual production capacity for facilities to be converted will be calculated on the basis of the relative weightings of Tables 1 and 2(a), 2(b), and 2(c), until the conversion request is approved by the Conference of States Parties (the CSP).

Upon the Conference of States Parties' approval, the residual production capacity will be calculated based on the specialised equipment, and the special features of the buildings to be destroyed. The standard equipment and buildings approved for conversion will be excluded from the calculations.

When the conversion has been completed, the residual production capacity for the converted facility will be zero. This is based upon the requirements of paragraph 14 of Article V of the Convention, stating that a CWPF shall be converted in such manner that the converted facility is no more capable of being reconverted into a CWPF than any other facility used for industrial, agricultural, medical, pharmaceutical, or other peaceful purposes not involving the chemicals listed in Schedule 1.

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