DRAFT GRENFELL SEWER CONTRIBUTION POLICY 7.2.5



1. BACKGROUND

Council adopted the Grenfell Sewer Contributions Plan (Policy 7.2.4) on 18 May 2017. As per the policy adopted, the policy was to be reviewed at four (4) yearly intervals. To assist Council in meeting all statutory requirements, this policy (7.2.5) reflects the updates and will be reviewed every three (3) years.

Section 64 contributions are levied under the *Local Government Act 1993* towards sewer infrastructure by means of a cross-reference to Section 306 of the *Water Management Act 2000*. Council must have a policy in order to levy a Section 64 contribution.

2. PURPOSE

This document contains the Council procedures for administration, assessment and settlement of contributions for sewerage infrastructure in Weddin, as well as a schedule of the specific rates for contribution.

The policy also contains strategies relating to the provision of public infrastructure and the methodology for determining the contribution rates.

3. POLICY OBJECTIVES

The overall objectives of this policy are to:

- Enable Council to require contributions toward the provision of sewerage infrastructure needs in Grenfell which creates a demand for those facilities.
- Enable Council to recoup funds, which it has spent in the provision of public infrastructure in anticipation of development.
- Ensure that adequate public infrastructure is provided for, as part of any new development.
- Provide a comprehensive strategy for the assessment, collection, expenditure, accounting and review of contributions on an equitable basis.
- Provide developers with clear guidance as to the contributions payable for sewerage infrastructure.



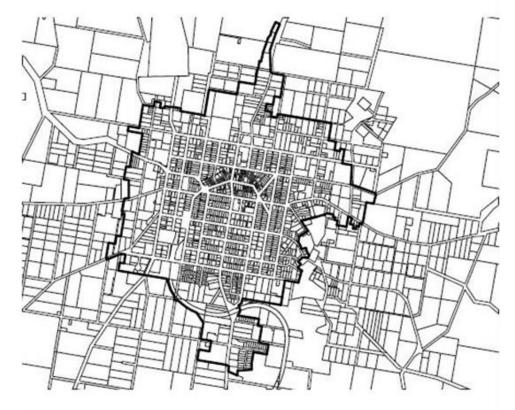


FIGURE 1 – BOUNDARIES OF GRENFELL SEWERED AREAS

4. LEGISLATION

The Policy relates to the following:

- Local Government Act 1993, section 64
- Water Management Act 2000, section 302
- Developer Charges Guidelines for Water Supply, Sewerage and Stormwater 2016 (DPI Water, NSW)
- Section 64 Determinations of Equivalent Tenements Guidelines, April 2017 (Water Directorate)

5. APPLICATION/SCOPE

This Policy applies at all times to all land within the boundaries of Grenfell sewered area as shown on *Figure 1*, and to any new areas proposed to be connected to the sewer.

The Contribution Plan relates primarily to development involving:

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- I. subdivision of land resulting in the creation of new allotments, and
- II. the erection of residential, commercial or industrial buildings on existing allotments.

Each will attract contributions levied in accordance with this policy and all other development proposals may also attract contributions levied in accordance with this policy.

6. POLICY

6.1. Roles and Responsibilities

The following table outlines the roles and responsibilities of personnel. Noting that the position titles may change, however, the responsibilities remain the same.

Roles	Responsibility
The Elected Council	The Elected Council must act in accordance with this Policy and abide by any determination made as a result of this Policy.
General Manager	The General Manager is responsible for the overall control and implementation of the Policy.
Director of Infrastructure Services	The Director of Infrastructure Services is responsible for audit control, monitoring and reporting.
Director of Environmental Services	The Director of Environmental Services is responsible for management and reporting.
Council Officers	Council officers must act in accordance with this policy and abide by any determination made as a result of this policy.
General Public	The general public must act in accordance with this policy and abide by any determination made as a result of this policy.

6.2. Determining Number of Standard ET's

In determining the Standard Sewer ET's for all required developments the Water Directorate Section 64 Determinations of Equivalent Tenements Guidelines (standard ET Figures Tables), will form the basis for all



calculations, with consideration of the type (categories) and scale of the development. See Annexure A.

6.3. Payment of Contributions

Depending on the type of infrastructure in question, contributions may be required to be settled by one or a combination of the following methods:

- Monetary contribution
- Dedication of land
- Provision of a material public benefit (i.e. works "in kind").

The type of contribution required will generally be a monetary payment.

6.4. Timing of Contributions

Contributions are required to be paid as follows:

- Development Applications involving subdivision prior to the release of the plan of subdivision (i.e. issue of Subdivision Certificate)
- Development Applications involving building work prior to the time of building approval (i.e. issue of Construction Certificate)
- Development Applications where no building approval is required prior to the issue of an Occupation Certificate.

6.5. Deferred, Staged or Periodic Payment

The contributions levied by this policy are required to provide service infrastructure to new development as it comes on line.

To fund completion of this work all contributions must be paid as set out in Clause 6.4 above. Consideration will not be given to deferred, staged or periodic payments in order to settle contributions.

6.6. Dedication of Land and Material Public Benefit

Council may accept the dedication of land or the provision of a material public benefit or works "in kind" in lieu of a monetary contribution. Factors to be taken into consideration for such a request include:

 The extent to which the land, material public benefit or works satisfies a community need.



- The extent to which the land, material public benefit or works satisfies the purpose for which the contribution was sought.
- A consideration of location and other factors, which may affect usability.
- An assessment of recurrent maintenance costs to Council.

The maximum percentage of contribution that may be spent on material public benefit is 40% of the total value of the contribution.

6.7. Review of the Contribution Rates

Council will review the contribution rates annually as part of the annual budget preparation process to ensure that the monetary contributions continue to reflect the community costs associated with the provision of water and sewerage infrastructure.

The contribution rate will be reviewed on the basis of the Consumer Price Index (CPI) for Sydney Construction* in accordance with the following formula:

$$C_2 = C_1 \times \frac{CPI_2}{CPI_1}$$

Where

 C_2 = new contribution C_1 = present contribution

CPI₂ CPI for last 12 months (to December guarter)

CPI₁ CPI for previous 12 months (to December quarter)

Council may also review the works schedule, the estimated costs of the various infrastructure or other aspects relating to the Contributions Plan.

6.8. Transitional Arrangements

A Development Application, which has not been determined but was submitted since the exhibition of the draft plan and prior to the adoption of this policy shall be determined in accordance with this policy.

7. DEVELOPMENT POTENTIAL

7.1. Background

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^{*}There is no regional NSW CPI index. The National CPI was compared to the Sydney CPI. Source: https://www.treasury.nsw.gov.au/nsw-economy/nsw-economic-dashboard



The Weddin Shire sewerage system serves all of the development within the town of Grenfell and does not extend to rural development. The unserviced rural properties are isolated and not economically viable to service.

Council is responsible for the installation, maintenance and operation of the sewerage reticulation pipe network, sewerage treatment plant and sludge disposal. The area serving Grenfell is approximately 325ha.

There is one new sewerage treatment works (2206 EP capacity) providing primary, secondary and tertiary treatment. The system comprises a two-train IDAL treatment plant, 28 kilometres of reticulation, and overflow discharge to Emu Creek Reuse water is utilized for several parks and recreational fields.

It should be noted that water is supplied by Central Tablelands County Council to the town of Grenfell NSW.

Year	Population	Avg Growth Rate	EP	Cumulative ET
2008	1994	0.1	1994	997
2013	2004	0.1	2004	1002
2018	2014	0.1	2014	1007
2023	2024	0.1	2024	1012
2028	2034	0.1	2034	1017

The sewerage treatment plant has been designed for a capacity of 2206 EP which translates to approx. 1103 ET.

7.2. Approach to Calculating Contributions

While the total development potential for Grenfell is 1103 ETs, and although part of the township is already developed or has existing approvals, the town as a whole is expected to benefit from the sewerage infrastructure.

8. INFRASTRUCTURE REQUIREMENTS

Public utility infrastructure is required to service the land identified for development within the contribution plan area. The nexus between the development and the contributions being levied is described below.



8.1. Nexus

There is a number of connected premises to the sewerage system in the town of Grenfell, it is reasonable that all development (i.e. 1103 ETs) be connected to the sewerage system and that the capital costs of the system to meet demand, and of physically bringing the system to development sites, should be borne by all new development, including existing and proposed.

8.2. Calculation of Developer Charge

a) Capital Charge

From Council's draft Strategic Business Plan 2013, the cost of capital works for the sewage treatment works (excluding reticulation and the effluent scheme) is \$11,872,417

Capital Works \$11,872,417
Capital Charge = Total ETS 1,103
= \$10,764

b) Reduction Amount

Net income per ET (estimated) \$100pa Reduction amount (30 years) = \$100 x 30 = \$3,000

c) Developer Charge

Developer Charge = Capital Charge - Reduction Amount = \$10,764 - \$3,300 = \$7,764 per ET

8.3. Funding

The funding of the required infrastructure for new development is by developer contributions paid prior to the commencement of development of the land. This will require contributions to be paid in full in accordance with clause 6.3 and 6.4 of this policy. Funding for existing development will be via annual rates and charges.

8.4. Other Utility Infrastructure

Other utility infrastructure for development in the Grenfell area includes water, electricity and telecommunications. All new subdivisions are to provide



the full range of utility infrastructure. The provision of this infrastructure is made directly with the following agencies:

Infrastructure	Agency
Electricity	Essential Energy
Telecommunications	Telstra/NBN
Water	Central Tablelands Water

9. ACCOUNTABILITY

9.1. S64 Statutory Reserves

Council has established a statutory reserve for the management of contributions under this Plan. The following separate ledger has been established:

Sewerage.

Contributions paid into this ledger will be spent for the purpose for which they were levied generally as the works are required as a result of the developments from which the contributions have been received. It is expected the contributions will roll over each year, with some items removed as costs are discharged, and new items added with consequential adjustments to the Works Program. Interest will be calculated on funds held in each ledger and credited to each ledger as appropriate.

9.2. Priority of Spending

Council may permit the short-term transfer of funds between ledgers in order to enable works to be undertaken on a priority basis.

This will only be done on the basis that:

- Full details of the transfer and subsequent reimbursement of funds are recorded in the respective ledgers.
- The transferred funds are returned to the relevant ledger by future contributions.



- There is a reasonable expectation that future contributions will be obtained to enable reimbursement of the ledger from which the monies have been transferred.
- The purpose for which the contributions are transferred is a purpose identified in the Works Program.
- The transfer of contributions will not delay or threaten the provision of any infrastructure identified in the Works Program.
- The contributions will be spent as the works are required as a result of the developments from which contributions have been received.

Priorities for spending will be determined annually via Council's Operational Plan.

9.3. Contributions Register

Council will maintain a register of all contributions received. The register will record:

- The origin of each contribution by reference to the Development Consent to which it relates.
- The date of receipt of the contribution.
- The type of contribution received (e.g. money, land, works "in kind").
- The amount of the contribution and the purpose for which it was levied.
- The total contributions received each financial year by purpose.
- The total of contributions expended each year by purpose.
- Expenditures from the fund according to date and purpose including details of priority spending.
- Interest earned and apportionment between the ledgers.

The register will be available for public inspection, free of charge, at any time during normal office hours.

9.4. Annual Statement

Council will produce an Annual Statement of contributions received and expended for a Financial Year as part of its usual Financial Statements. These Statements will be available free of charge, at any time during usual office hours.

10. DEFINITIONS

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Key Terms	Meaning
Applicant	means the person, company or organisation submitting an
	application
Council	means the Weddin Shire Council
Equivalent Person / EP	is the water supply demand or the quantity and/or quality of
	sewage discharge for a person resident in a detached house
Equivalent Tenement / ET	is considered to be the demand or loading a development
	will have on infrastructure in terms of the average sewage
	discharge for an average residential dwelling or house,
	based on state-wide data.
Recoupment	means the payment of a monetary contribution to the
	Council to offset the value of funds (including any interest),
	which the Council has already incurred in providing public
	facilities in anticipation of development.
Settlement	means payment (or securing, subject to Council policy) of a
	monetary contribution, the undertaking of a work in kind or
	the dedication of land required as a result of new
	development

Title: Draft Grenfell Sewer Contributions Policy							
Department: Infra	astructure Services						
Version Date Author							
7.2.1	Adopted 23 October 2024						
7.2.2	Adopted 24 June 2010						
7.2.3	Adopted 20 June 2013						
7.2.4	Adopted 18 May 2017						
7.2.5	Waliul Islam						

This policy may be amended or revoked at any time and must be reviewed at least three (3) years since its adoption (or latest amendment). The Director Infrastructure Services will be responsible for the review of this policy. Review of this policy will incorporate relevant legislation, documentation released from relevant state agencies and best practice guideline.

Review Date: TBC

Amendments in the release						
Amendment History Date Detail						
Annexure Attached:		•				



A – Standard ET Figures (Extracts Section 64 Determination of Equivalent Tenements Guidelines – NSW Water Directorate 2017.)

Noreen Vu
General Manager

ANNEXURE A

Table 1 Residential User Categories



7 STANDARD ET FIGURES – RESIDENTIAL USER CATEGORIES

Table 1: Standard ET Figures - Residential User Categories

	STANDARD	SUGGEST	TED VALUES
CATEGORY	UNIT	WATER	SEWER
	ONIT	ET	ET
Single Residential Lots (House)			
Standard Residential Lot (450m ² - 2000m ²)	Lot	1.00	1.00
Small Residential Lot (< 450m2)	Lot	Use	Units
Large Residential Lot (> 2000m2)	Lot	1.20	1.00
Multi-Residential Lots (Medium Density 1 - 2 Storey)			
Dual Occ - 1 bedroom	Dwelling		
Dual Occ - 2 bedroom	Dwelling		. 5:
Dual Occ - 3 bedroom (or more)	Dwelling	Section of Physics are read and section an	t Size of < 450m2 /
Duplex - 1 bedroom	Dwelling	The second secon	dard Residential Lot = 450m2 / dwelling
Duplex - 2 bedroom	Dwelling	TOT LOC SIZE > OF	- 450m2 / aweiling
Duplex - 3 bedroom (or more)	Dwelling		
Units - 1 bedroom	Dwelling	0.40	0.50
Units - 2 bedroom	Dwelling	0.60	0.75
Units - 3 bedroom (or more)	Dwelling	0.80	1.00
Multi-Residential Lots (High Density)			
Multi Storey Apartments (1 bedroom)	Dwelling	0.33	0.50
Multi Storey Apartments (2 bedroom)	Dwelling	0.50	0.75
Multi Storey Apartments (3 or more bedroom)	Dwelling	0.67	1.00

Notes

1 Standard ET = Town Water Usage of 230 kL/a & Sewage Loading of 140 kL/a

Table 2 Commercial User Categories



8 STANDARD ET FIGURES – COMMERCIAL USER CATEGORIES

Table 2: Standard ET Figures - Commercial User Categories

	SUGGESTED VALUES		ED VALUES			
	STANDARD .					
CATEGORY	UNIT	WATER	SEWER	COMMENTS		
		ET	ET			
ACCOMMODATION (PERMANENT)						
Nursing Home / Special Care Home	Bed	0.50	0.75	Unchanged in 2017 edition. Limited medical facilities, communal kitchen / laundry		
Self-Care Retirement Units / Villas	-	Use Reside	ential Units	Internal kitchen / laundry facilities		
Self-Care Retirement - Serviced Unit (Onsite)	-	Use Nurs	ing Homes	No internal kitchen / laundry facilities		
Self-Care Retirement - Serviced Unit (Offsite)	Bed	0.30	0.45	No internal kitchen / laundry facilities		
Boarding House	Bed	0.33	0.50	Communal kitchen / laundry		
Caravan / Mobile Home Park (1 br)	Van	0.40	0.50			
Caravan / Mobile Home Park (2 br)	Van	0.60	0.75	Use if number of rooms unknown		
Caravan / Mobile Home Park (3 br)	Van	0.80	1.00			
ACCOMMODATION (SHORT TERM)				Peak week loading - use peak occupancy		
Caravan Park						
Camping Site (temporary)	Site	0.50	0.63	Site approx. equivalent to average caravan site		
Caravan / Cabin Site (temporary)	Site	0.50	0.63	Also use for on-site caravans / cabins		
Bed & Breakfast / Guest House	Room	0.40	0.50	House based with communal kitchen / laundry		
Motel / Hotel / Resort Room	Room	0.30	0.45	Consider food prep, entertainment & sporting separately		
Backpackers / Hostel	Bed	0.15	0.23	Communal kitchen, small laundry, not serviced		
Serviced / Unserviced Apartments	-		es lots (high sity)	Self contained (if not use motel)		
ACCOMMODATION (MEDICAL						
CARE)						
Hospital	Bed	0.90	1.43	Includes medical facilities		
Hostel (Medical)	Bed	0.70	1.11	Includes some medical facilities		
Business (Excluding Food Preparation)						
General						
Single Retail Shop	Floor Area m ²	0.01	0.01	Reviewed 2017		
Supermarket	Floor Area m ²	0.00	0.00	Includes minor food preparation		
Shopping Centre	H	Insuffici	ent Data	Consider amenities, food prep & specific bus. separately		
Offices	Floor Area m ²	0.01	0.01	Reviewed 2017		
Specific		v				
Hairdresser / Beauty Salon	Basin	0.50	0.79			
Laundromat	Machine	0.45	0.71			
Medical Centre	Room	0.40	0.63	Based on number of consultation rooms, unchanged in 2017 edition		
Plant Nursery	-	Insuffici	ent Data	Consider case by case		
Car Yard / Showroom	Floor Area m ²	0.00	0.00			
Service Station	Lane	0.60	0.90			



CATEGORY	STANDARD UNIT	SUGGESTED VALUES		COMMENTS
		WATER ET	SEWER ET	
Car Wash (auto wash or self-	Bays or Lanes	5.70	9.03	Unchanged in 2017 edition but with updated
serve)			J. post	standard unit of measure description.
Escort Agency	Room	0.40	0.50	
Animal Boarding	Floor Area m ²	Insuffici	ent Data	Consider case by case
Vet or Grooming	Floor Area m²	0.01	0.01	
Self Storage	Floor Area m ²	0.00	0.01	Consider office area only
FOOD PREPARATION				
General				
Restaurant / Café	Floor Area m ²	0.01	0.01	
Take Away / Fast Food (no amenities)	Floor Area m ²	0.02	0.02	Unchanged in V2 review. Also use for general food preparation
Take Away / Fast Food (including amenities)	Floor Area m ²	0.03	0.05	Unchanged in V2 review.
Catering	Floor Area m ²	0.02	0.02	
Specific				
Bakery	-	Insuffici	ent Data	Use Take Away / Fast Food (non amenities)
Butcher	-	VC100000140414111111000	ent Data	Use Take Away / Fast Food (non amenities)
Fishing Co-op	-	Insuffici	ent Data	Use Take Away / Fast Food (non amenities)
ENTERTAINMENT				
Licensed Club	Floor Area m ²	Insuffici	ent Data	Separate into Food Preparation, Entertainment, Amenities
Pub / Bar	Floor Area m ²	0.03	0.05	Consider food preparation area separately
Cinema / Theatre / Public Entertainment	-	Insuffici	ent Data	Use Food Preparation & Amenities
Function / Conference Centre	-		ent Data	Use Food Preparation & Amenities
Marina	Berth	0.60	0.90	12.1
SPORTING/SPECTATOR FACILITIES				
General				
Amenities & Indoor Facilities	-	Insuffici	ent Data	Use Food Preparation & Amenities
Specific				
Hockey Field (artificial surface)	-	The second secon	ent Data	Consider case by case
Bowling Alley	Lane	0.35	0.55	0
Bowling Green	=		ent Data	Separate into Food Preparation, Amenities, Irrigation
Swimming Pool - Indoor	ML		ent Data	Consider case by case
Swimming Pool - Outdoor	ML	Insuffici	ent Data	Consider case by case
COMMNITY FACILITIES		0.00	0.10	
Child Care Centre / Pre-school	Person	0.06	0.10	
Education - School (primary & secondary)	Person	0.03	0.05	
Education - College, University (tertiary)	Person	0.02	0.02	Consider Food Preparation separately
Correctional Centre	Person	0.50 0.75		
Church / Place of Worship	-	Insufficient Data		Use Food Preparation & Amenities
Community Centre / Hall	-		ent Data	Use Food Preparation & Amenities
Parks / Gardens / Reserves (Irrigation)		Insuffici	ent Data	Consider case by case
Public Amenities Block (per shower)	Shower	0.40	0.63	Unchanged in V2 review.
Public Amenities Block (per wc)	wc	0.40	0.63	Unchanged in V2 review.

Notes

Table 3 Industrial User Categories (General)

¹ Standard ET = Town Water Usage of 230 kL/a & Sewage Loading of 140 kL/a Assumed Residential Standard Discharge Factor: 60%



9 Standard ET Figures – Industrial User Categories (General)

Table 3: Standard ET Figures - Industrial User Categories*

		SUGGESTED VALUES		
CATEGORY	STANDARD UNIT	WATER ET	SEWER ET**	
INDUSTRIAL GENERAL				
Light Industrial	Gross Ha	15	15	
Future Unknown - Light	Gross Ha	15	15	
Future Unknown - Med	Gross Ha	30	30	
Future Unknown - Heavy	Gross Ha	50	50	

^{*} For industrial categories that have process water, it is suggested that a non-typical development ET is determined based on the methodology in Section 6.3 of the guidelines.

Notes

1 Standard ET = Town Water Usage of 230 kL/a & Sewage Loading of 140 kL/a Assumed Residential Standard Discharge Factor: 60% Gross Ha = Total land area of zone

^{**} Additional ET figures for sewer have been included on Table 4, for a large range of detailed subcategories. These figures are provided for background information and should only be used as a general guide or where actual consumption data cannot be obtained.



Table 4 Industrial User Categories (Detailed)

10 Standard ET Figures for Sewer – Industrial User Categories

Table 4: Standard ET Figures for Sewer - Industrial User Categories (Detailed)

		SEWER ET				
CATEGORY	STANDARD UNIT	WSAA ET / Built-up Ha (N=1)	WSAA ET / Built-up Ha (N=2)	WSAA ET / Built-up Ha (N=3)	WSAA ET / Built- up Ha (N=4)	PWD
FOOD MANUFACTURE						
Dairy						
Milk	Built-up Ha	2,857	1,914	1,743	1,600	1,400
Cheese, butter and yoghurt	Built-up Ha	1,714	1,149	1,046	960	850
Ice Cream	Built-up Ha	571	383	349	320	350
Fruit and Vegetable						
Cannery	Built-up Ha	1,143	766	697	640	550
Condiments and Sauces	Built-up Ha	1,143	766	697	640	550
Meat						
Abattoir	Built-up Ha	1,143	766	697	640	550
Rendering tallow	Built-up Ha	571	383	349	320	300
Gelatine and glue	Built-up Ha	1,714	1,149	1,046	960	850
Poultry	Built-up Ha	2,286	1,531	1,394	1,280	1,100
Small-goods	Built-up Ha	1,143	766	697	640	550
Grain						
Flour milling	Built-up Ha	29	19	17	16	15
Starch	Built-up Ha	1,714	1,149	1,046	960	850
Edible oils and fats	Built-up Ha	2,286	1,531	1,394	1,280	1,100
Cereals	Built-up Ha	286	191	174	160	150
Bakery	Built-up Ha	29	19	17	16	15
Biscuits and cakes	Built-up Ha	286	191	174	160	150
Beverages						
Beer	Built-up Ha	1,143	766	697	640	550
Soft drinks and cordials	Built-up Ha	571	383	349	320	300
Others						
Yeast	Built-up Ha	2,286	1,531	1,394	1,280	1,100
Confectionery	Built-up Ha	143	96	87	80	80
Salt	Built-up Ha	571	383	349	320	300
TEXTILE AND LEATHER						
Tannery and Hides	Built-up Ha	1,143	766	697	3,640	550
Wool	access on consensations (1893 standards)		78.09V0 - X	7990	•	
Wool scour	Built-up Ha	2,286	1,531	1,394	1,280	1,100
Felt and Carpet	Built-up Ha	571	383	349	320	300
Dyeing and spinning	Built-up Ha	571	383	349	320	300
Cotton and Synthetics	Commence Control (Control (Con			-	The second secon	
Dyeing and spinning	Built-up Ha	1,143	766	697	320	550



				SEWER ET		
CATEGORY	STANDARD UNIT	WSAA ET / Built-up Ha (N=1)	WSAA ET / Built-up Ha (N=2)	WSAA ET / Built-up Ha (N=3)	WSAA ET / Built- up Ha (N=4)	PWD
CHEMICAL			1		1	0) 1000 100
Petrochemical						
Oil Refinery	Gross Ha	29	19	17	16	15
Pharmaceutical	Built-up Ha	286	191	174	160	150
Organic			301 (2.9.3) (4.1.0)			000 00 18 0 0000000
Liquids	Built-up Ha	571	383	349	320	300
Resins, polymers and		1		3575		3.30.000.000
plastics	Built-up Ha	571	383	349	320	300
Adhesives	Built-up Ha	571	383	349	320	300
Soaps and detergents	Built-up Ha	286	191	174	160	150
Paint manufacture	Built-up Ha	143	96	87	80	80
Metal Processing						
Metal Finishing						
Electroplating	Built-up Ha	571	383	349	320	300
Anodizing	Built-up Ha	571	383	349	320	300
Galvanizing	Built-up Ha	571	383	349	320	300
Battery Manufacture						
Dry Cell	Built-up Ha	286	191	174	160	150
Wet cell (lead acid)	Built-up Ha	286	191	174	160	
Engineering						
Machine shops	Built-up Ha	286	191	174	160	
Sheet metal	Built-up Ha	286	191	174	160	
Foundry	Built-up Ha	286	191	174	160	
Rolling	Built-up Ha	286	191	174	160	
Extrusion	Built-up Ha	286	191	174	160	
Manufacture - Non-Metallic						
Paper	Built-up Ha	143	96	87	80	80
Plastics	Built-up Ha	571	383	349	320	
Wood	Built-up Ha	143	96	87	80	80
Mining (Earth)						
Glass	Built-up Ha	143	96	87	80	80
Fibre cement	Built-up Ha	71	48	43	40	
Concrete products	Built-up Ha	1,143	766	697	640	
Services						
Laboratories						
Industrial and research	Built-up Ha	1,143	766	697	640	550
Others						
Film Processing	Built-up Ha	571	383	349	320	300

Notes

N = number of independent same category industrial connections Built-up Ha = Total floor area of building Gross Ha = Total land area of zone For more information refer to (PWD, 1987) & (WSAA, 2002)