

Water and Sanitation, Waste Hygiene and Public Health: in the Context of Co-existence with COVID-19

Waste collection and transportation

～コロナとともに生きるために～
廃棄物の収集・運搬

FUKUOKA ENVIRONMENT FOUNDATION

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Overview of the Fukuoka environment foundation

会社概要

Main work content 主な事業

1. Waste collection and transportation(solid waste, night soil)

廃棄物収集運搬

2. Inspection of drainage facilities in the house

排水設備検査業務（宅地内の排水を公共下水道に流す設備の検査）

3. Collection of night soil and disposal

し尿処理手数料徴収業務

4. Fee Collection from household waste

家庭系ごみ処理手数料徴収

5. Raising environmental awareness for citizens (Environmental education)

環境啓発（環境教育）

6. International cooperation(Waste management training)

国際協力（廃棄物埋立技術研修）



Door-to-door waste collection at night

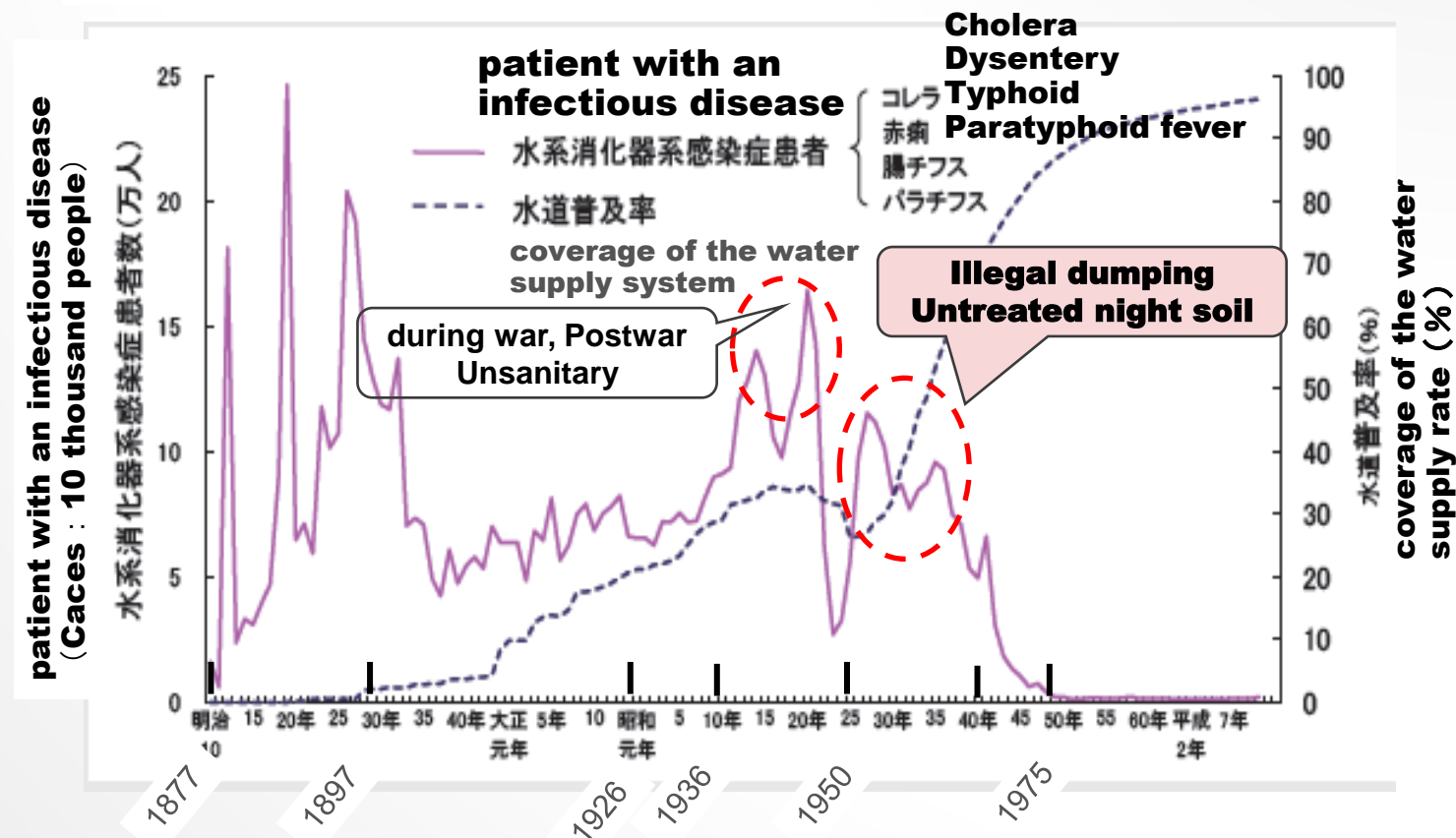
Institutional transition of Wastes Disposal and Public Cleansing Act

廃棄物処理法の変遷

Year 年	Measures for general waste (一般廃棄物対策)
1900 明治33	Filth cleaning act 汚物掃除法 Measures against infectious diseases (伝染病対策として汚物処分の市町村責任)
1954 昭和29	public cleansing act 清掃法 (処理主体を全国の市町村に拡大)
1970 昭和45	Wastes Disposal and Public Cleansing Act 廃棄物処理法 Municipal management responsibility for general waste treatment (一般廃棄物処理の市町村管理責任)

coverage of the water supply rate and number of infectious disease patients

水道普及率と水系消化器系感染症患者の推移



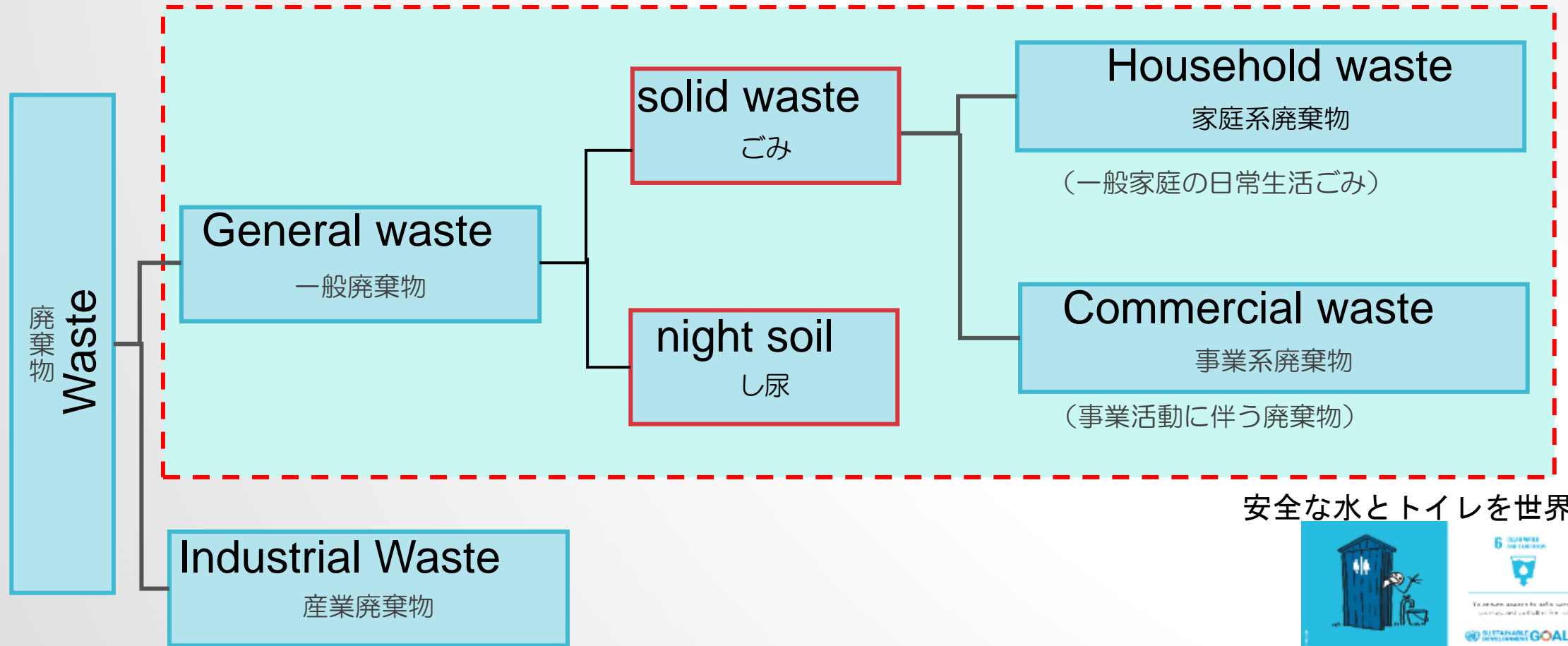
参照：平成30年度水循環白書



FUKUOKA ENVIRONMENT FOUNDATION

Types of waste

廃棄物の種別



安全な水とトイレを世界中に



ふくおか環境財団は持続可能な開発目標（SDGs）を支援しています

Improve public health and c onservation the environment 公衆衛生の向上と生活環境の保全

Purpose of Wastes Disposal and Public Cleansing Act (廃棄物処理法の目的)

- ① Improving public health (公衆衛生の向上)
- ② Conservation of living environment (生活環境の保全)



Night soil and Waste collection and transportation cannot be suspended during the COVID-19

廃棄物収集はコロナ禍においても止められない仕事

Clear responsibilities of collection and transportation service providers are essential

収集・運搬サービスの責任を負うところを明確にしなければいけない

Control of COVID-19 Spread

COVID-19の感染防止

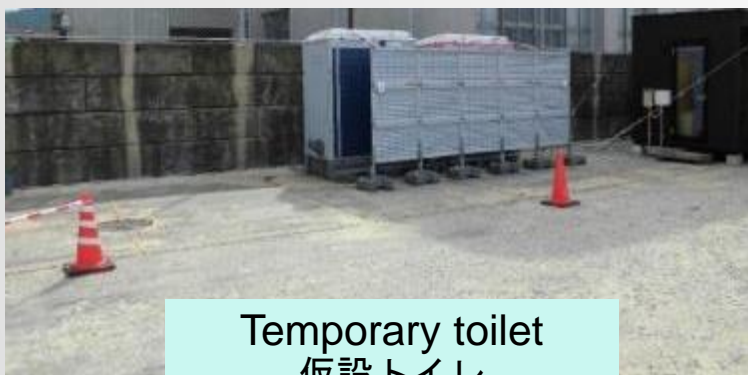
Personal protection 個人防護

- masks マスク
- gloves 手袋
- Work uniform
(Long sleeves, long pants)
長袖、長ズボンの作業着
- Hand washing after work
作業後の手洗い
- Alcohol disinfection of hands
手のアルコール消毒
- Alcohol disinfection inside cars
車内のアルコール消毒
- Car wash 洗車
- Use of bath/shower after work
with a small number of people
作業後の入浴・シャワーの少人数での使用



Temporary toilets placed at PCR Testing facilities

コロナPCR検査場所の仮設トイレの収集作業



Temporary toilet
仮設トイレ



vacuum truck
収集車両



Working
作業中

- disposable wear
- goggle
- face guard
- mask
- Boots
- gloves



Infection protection gears
防護



Entire disinfection
全体の消毒



Put in a bag and discard
着用したものを袋に入れて廃棄

Control of COVID-19 Spread

COVID-19の感染防止



garbage collection work

ごみの収集作業



**Keeping alcohol sprays in
each truck**

車内にアルコール消毒スプレー常備



**truck wash after collection and
transportation work**

作業後の洗車

Collection of Night Soil

し尿の収集計画

Example of collection plan (Example of one truck : truck A)

収集計画の例 (A車両)

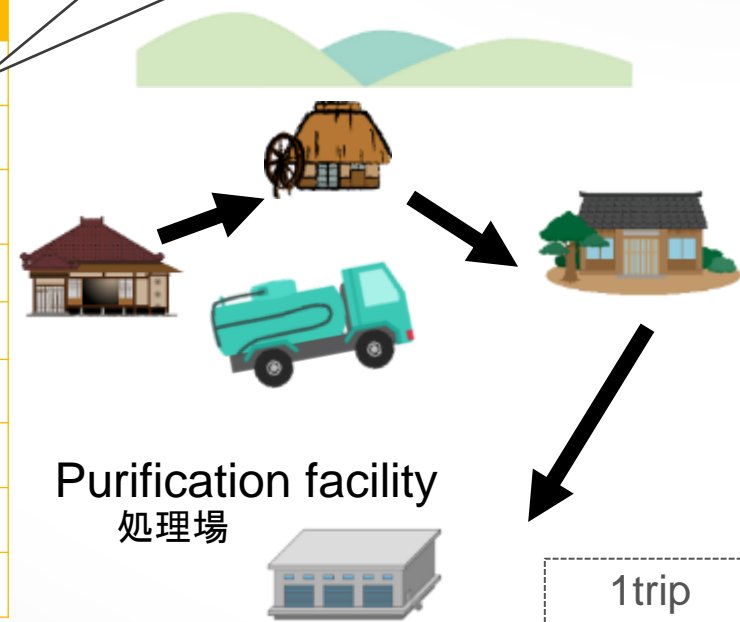
Conditions: Work is done regularly once a month in principle

条件：作業は原則月1回、定期的に行う

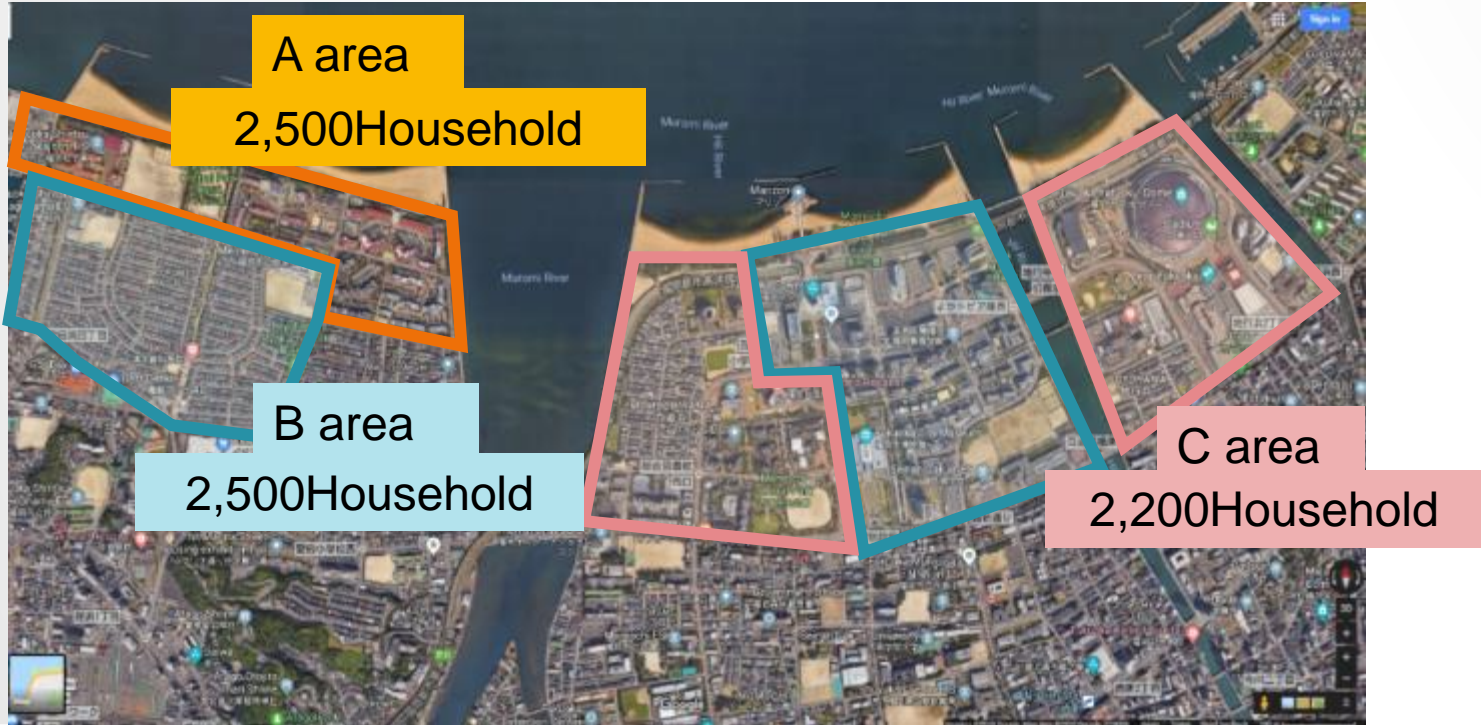
Aさんは、毎月1日頃に来てくれることがわかり安心

Monthly collection day 毎月の収集日	area エリア	Number of collections 収集軒数	Collection destination list 収集先リスト
1st 1日	A area A地区	30 houses 30軒 (5Kl/day=2.5Kl/trip × 2tirp)	Mr. A's house A宅 Mr. B's house B宅 Mr. C's house
2nd 2日	B area B地区	35 houses 35軒	F-A宅 F-C宅 F-D宅.....
3rd 3日	C area C地区	35 houses 33軒	C-A宅 C-B宅 C-C宅

30th: End of month 30日



Waste collection and transportation
case of Fukuoka Environment Foundation
廃棄物の収集運搬例



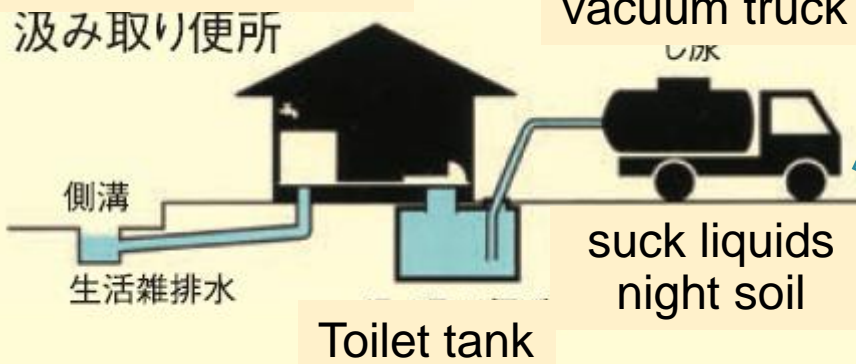
Types	Collection date 収集日		
	A area	B area	C area
burnable waste	Every Mon ,Thu (月・木)	Every Tue , Fri (火・金)	Every Wed , Sat (水・土)
un-burnable waste	2nd Thursday (第2木曜)	3rd Thursday (第3木曜)	4th Thursday (第4木曜)
PET and glass bottles	4th Thursday (第4木曜)	1st Thursday (第1木曜)	2nd Thursday (第2木曜)

Sanitation: Public Health

Environmental pollution prevention

公衆衛生と環境汚染防止

Toilet tank type



Purification facility
処理場



Septic tank Type (jokaso)



Example: night soil treatment し尿処理場（酸化池） Oxidation Ponds for Low-Cost Sanitation

- No power required
- Low maintenance cost
- Simple technology

- Appropriate maintenance is required to improve public health
公衆衛生の向上には適切な維持管理が必要
- Regular sludge and night soil suck required
定期的な汚泥、し尿の引き抜きが必要

Distribution of toilets

トイレの普及を

安全な水とトイレを世界中に



Temporary toilet on a small truck



Temporary toilet

Disaster related waste

災害廃棄物



Disaster waste on the road



Disaster waste in vacant area



Temporary garbage storage in the event of a disaster



Before and after collection of disaster waste

災害廃棄物の収集作業の前と後



Before 前



After 後



Thank you

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