# Medical, Municipal and Plastic Waste Management Handbook

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**Engineers** 

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SERVICES

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Waste management is the collection, transport, processing, recycling or disposal, and monitoring of waste materials. Concern over environment is being seen a massive increase in recycling globally which has grown to be an important part of modern civilization. The consumption habits of modern consumerist lifestyles are causing a huge global waste problem. Rapid urbanization and industrial diversification has led generation of considerable qualities of municipal, plastic, hazardous and biomedical waste. Further the rapid industrial developments have, led to the generation of huge quantities of hazardous wastes, which have further aggravated the environmental problems in the country by depleting and polluting natural resources. Therefore, rational and sustainable utilization of natural resources and its protection from toxic releases is vital for sustainable socioeconomic development. Hazardous waste management is a new concept for most of the Asian countries including India. The utilization of resources and generation of waste is for beyond the limit that the biosphere was made to carry. Recycling of plastics should be carried in such a manner to minimize the pollution level during the process and as a result to enhance the efficiency of the process and conserve the energy. The concern for bio medical waste management has been felt globally with the rise in infectious diseases and indiscriminate disposal of waste. It is to be understood that management of bio medical waste is an integral part of health care. There is a clear need for the current approach of waste disposal in India that is focussed on municipalities and uses high energy/high technology, to move more towards waste processing and waste recycling (that involves public private partnerships, aiming for eventual waste minimization driven at the community level, and using low energy/low technology resources.

This book basically deals with characterization of medical waste, medical waste data collection activities, medical waste treatment effectiveness, gas sterilization, medical waste reuse, recycling and reduction, selection of waste management options, fundamental concepts related to hospital waste incineration, linkage of bio medical waste management with municipal waste management, waste identification and waste control program for the health care establishments, waste treatment and disposal: the rules and the available options, recycle spoiled photographic film and paper etc.

Waste management is one of the essential obligatory functions of the country. This service is falling too short of the desired level of efficiency and satisfaction resulting in problems of health, sanitation and environmental degradation. This book provides overview of the status of medical, municipal and plastic waste management. A treatment technique includes sterilization, incineration and number of recycling methods.

- 1. Characterization of Medical Waste
- 1. INTRODUCTION AND OVERVIEW
- 2. MEDICAL WASTE GENERATION

Methodology

Summary of Preliminary Results

3. MEDICAL WASTE DATA COLLECTION ACTIVITIES

**Transporter Notification** 

Results

**Transporter Periodic Reports** 

**On-Site Incinerators** 

- 2. Medical Waste Treatment Effectiveness
- 1. INCINERATION

**Factors Affecting Effectiveness** 

Medical Waste Treatment Effectiveness

**Quality Assurance and Quality Control Procedures** 

Maintenance and Operator Training

2. STEAM STERILIZATION

**Factors Affecting Effectiveness** 

Quality Assurance and Quality Control Procedures

Maintenance and Operator Training

3. GAS STERILIZATION

**Factors Affecting Effectiveness** 

Quality Assurance and Quality Control Procedures

Maintenance and Operator Training

4. CHEMICAL DISINFECTION

**Factors Affecting Effectiveness** 

Quality assurance and Quality Control Procedures

Maintenance and Operator Training

5. THERMAL INACTIVATION

**Factors Affecting Effectiveness** 

Quality Assurance and Quality Control Procedures

6. IRRADIATION

**Factors Affecting Effectiveness** 

Quality Assurance and Quality Control Procedures

Maintenance and Operator Training

7. MICROWAVE TREATMENT

**Factors Impacting Effectiveness** 

Quality Assurance and Quality Control Procedures

Maintenance and Operator Training

8. GRINDING AND SHREDDING

**Factors Affecting Effectiveness** 

Quality Assurance and Quality Control Procedures

Maintenance and Operator Training

9. COMPACTION

Factors Affecting Effectiveness

Quality Assurance and Quality Control Procedures

Maintenance and Operator Training

- 3. Medical Waste Handling Methods
- 1. INTRODUCTION
- 2. CURRENT PRACTICES

Handling and packaging practices

For Off-Site Incineration

Medical Waste Handling Materials

For Landfill Disposal

For On-site Treatment or Disposal

For Sewer and Ocean Disposal

3. STANDARDS IMPLEMENTED BY THE RULE

Segregation

**Packaging** 

Labeling

Marking

Storage

**Transport** 

4. EVOLVING HANDLING AND MANAGEMENT TECHNIQUES 19

Handling

Compaction

- 5. METHODS TO EVALUATE MEDICAL WASTE HANDLING
- 4. Medical Waste Reuse, Recycling and Reduction
- 1. RECYCLING AND REUSE
- 2. SOURCE REDUCTION
- 3. GENERATION RATES
- 4. AGENCY ACTION
- 5. Infectious Waste Characterization
- 1. DEFINITION OF INFECTIOUS WASTE
- 2. TYPES OF INFECTIOUS WASTE
- 1. Isolation Wastes
- 2. Cultures and Stocks of Infectious Agents and Associated Biologicals
- 3. Human Blood and Blood Products
- 4. Pathological Wastes
- 5. Contaminated Sharps
- 6. Contaminated Animal Carcasses, Body Parts, and Bedding
- 3. MISCELLANEOUS CON TAMINATED WASTES (OPTIONAL CATEGORY)
- 6. Infectious Waste Management
- 1. INTRODUCTION
- 2. SELECTION OF WASTE MANAGEMENT OPTIONS
- 3. INFECTIOUS WASTE MANAGEMENT PLAN
- 1. Designation of Infectious Waste
- 2. Segregation of Infectious Waste
- 3. Packaging of Infectious Waste
- 4. Storage of Infectious Waste
- 5. Transport of Infectious Waste (on- and off-site)
- 6. Treatment of Infectious Waste
- 7. Disposal of Treated Wastes
- 8. Contingency Planning
- 9. Staff Training
- 7. Treatment of Infectious Waste
- 1. INTRODUCTION
- 1. Monitoring
- 2. Steam Sterilization
- 3. Incineration
- 4. Thermal inactivation
- 5. Gas/Vapour Sterilization
- 6. Chemical Disinfection
- 7. Sterilization by Irradiation
- 8. Other Treatment Methods
- 8. Medical Waste

- 1. CYTOTOXIC CHEMICALS
- 2. HAZARDOUS CHEMICALS
- 3. PATHOGENS
- 4. TOXIC METALS
- 5. RADIOACTIVE MATERIALS
- 9. Hospital Incineration Systems
- 1. INTRODUCTION
- 2. FUNDAMENTAL CONCEPTS RELATED TO HOSPITAL WASTE INCINERATION
- 1. Chemical Reactions
- 2. Stoichiometric Combustion Air
- 3. Thermochemical Relations
- 4. Volumetric Gas Flows
- 5. The Combustion Process
- 3. HOSPITAL WASTE CHARACTERISTICS
- 4. TYPES OF HOSPITAL WASTE INCINERATOR SYSTEMS
- 1. Introduction
- 2. Multiple-chamber incinerators
- 1. Principle of Combustion and AirDistribution
- 2. Mode of Operation
- 3. Waste Feed Charging Systems
- 4. Ash Removal Systems
- 5. Use of Multiple-Chamber Incinerators for Incinerating Hospital Wastes
- 3. Controlled-Air Incinerators
- 1. Principle of Controlled Air Incineration
- 2. Batch/Controlled-Air incinerators
- 3. Intermittent-Duty, Controlled Air Incinerators
- 4. Continuous-Duty, Controlled Air incinerators
- 4. Rotary Kilns
- 1. Principle of Operation
- 2. Mode of Operation
- 3. Charging System
- 4. Ash Removal
- 5. Auxilliary Equipment
- 1. Waste Meat Boilers
- 2. Auxiliary Waste Liquid Infection
- 10. Bio-Medical Waste
- 1. INTRODUCTION
- 1. Linkage of Bio-medical Waste Management with Municipal Waste Management
- 2. ASSESSMENT OF CURRENT SITUATION
- 1. Waste Generation
- (i) Health Care Establishments
- (ii). Whole Town/City
- 2. Current Practices
- 3. Allocation of Responsibilities
- 3. BASIC ISSUES
- 1. Management Issues of Bio-medical Waste Management
- 2. Current Issues in Management of Health Care Waste
- 4. LEGAL ASPECTS AND ENVIRONMENTAL CONCERN
- 1. Bio-medical Waste (Management and Handling) Rules, 1998

Scope and application of the Rules

**Environmental Concern** 

5. WASTE IDENTIFICATION AND WASTE CONTROL PROGRAM FOR THE HEALTH CARE ESTABLISHMENTS

- 1. Identification of Various Components of the Waste Generated
- 2. An Exercise in Waste Control Programme
- 6. WASTE STORAGE
- 1. Recommended Labelling and Colour Coding
- 2. Segregated Storage in Separate Containers (at the Point of Generation)
- 3. Certification
- 4. COMMON/INTERMEDIATE STORAGE AREA
- 5. Parking Lot for Collection Vehicles
- 7. HANDLING AND TRANSPORTATION
- 1. Collection of Waste Inside the Hospital/Health Care Establishment
- 2. Transportation of Segregated Waste Inside the Premises
- 3. Collection and Transportation of Waste for Small Units
- 4. Transportation of Waste Outside
- 8. WASTE TREATMENT AND DISPOSAL: THE RULES AND THE AVAILABLE OPTIONS

Transportation of Waste Outside

- 1. Incineration
- 2. Autoclave Treatment
- 3. Hydroclave Treatment
- 4. Microwave Treatment
- 5. Chemical Disinfection
- 6. Sanitary and Secured Landfilling
- 7. General Waste
- 9. COMMON TREATMENT/DISPOSAL FACILITY
- 1. Establishment of the Facility
- 2. Tie Up of Health Care Set Ups
- 3. Private Sector Participation
- 10. OPERATION AND MAINTENANCE
- 11. OCCUPATIONAL HAZARDS AND SAFETY MEASURES
- 1. Occupational Hazards
- 2. Safety Measures for the Medical and Para-medical Staff
- 3. Safety Measures for Cleaning and Transportation Staff
- 12. FINANCIAL ASPECTS
- 13. TRAINING AND MOTIVATION
- 1. Training Modules for Different Levels of Staff
- (i) Medical and laboratory personnel:
- (ii) Para-medical personnel:
- (iii) Sweepers, cleaning staff, guards etc.:
- (iv) Administrative and management staff:
- 2. Incentives and Motivation
- 3. Awareness Generation
- 14. PLANNING ELEMENTS
- 1. Planning Inside the Health Care Establishment Premises
- 2. Planning Outside the Health Care Establishment
- 3. Relation to Overall Town Planning
- 4. Examples
- 15. MANAGEMENT ASPECTS
- 1. Organisational Set Up 104
- 2. Administration and Managerial Aspects 105
- 16. ANIMAL WASTE 105
- 11. Air Pollution Control
- 1. INTRODUCTION 108
- 2. POLLUTANT FORMATION AND GENERATION 108
- 3. CONTROL STRATEGIES 109

- 1. Controlling Feed Material
- 2. Combustion Control 111
- 3. Add-On Air Pollution Control Systems
- 1. Wet Scrubbers
- 2. Fabric Filters
- 3. Dry Scrubbers

12. Waste Minimization Options

Description of Techniques

**Better Operating Practices** 

Chemotherapy and Antineoplastic Wastes

Formaldehyde Wastes

Instal Reverse Osmosis (RO) Water Supply Equipment

**Determine Minimum Effective Cleaning Procedures** 

Reuse/Recycle Waste Solutions

**Proper Waste Management** 

Photographic Chemical Waste

Store Materials Properly

Recycle Spoiled Photographic Film and Paper

Test Expired Material for Usefulness

Extend Processing Bath Life

Use Squeegees

**Use Countercurrent Washing** 

Recover Silver and Recycle Spent Chemicals

Radionuclides

Solvents

**Material Substitution** 

Improved Laboratory Techniques

Recycle Solvents

Mercury

**Electronic Sensing Devices** 

Proper Spill Clean Up

Recycle/Reuse

Waste Anesthetic Gases

Toxics, Corrosives, and Miscellaneous Chemicals

Ethylene Oxide

Use of Recyclable Drums

**Proper Material Handling** 

Material Substitution

13. Vermiculturing

1. INTRODUCTION

#### 2. INTRODUCTION TO VERMICOMPOSTING

Reduction of particle size

Vermicomposting

Different stages and methods

3. THE INORA PROCESS

The biological means

Selection of biological methods

Bisanitization or accelerated aerobiosis

The biogas plants

The earthworm

4. ASSESSMENT

**Environmental assessment** 

Water

Gases

**Pollutants** 

**Aesthetics** 

Financial assessment

5. QUALITY AND STABILITY FACTORS IN COMPOSTING

Introduction

Appropriate standards

Raw versus composted waste

Identification

5. CONCLUSION

14. Municipal waste water treatment and energy recovery

1. INTRODUCTION

2. THE GANGA ACTION PLAN

3. INDO-DUTCH ENVIRONMENTAL PROJECT

INTEGRATED APPROACH

**UASB SYSTEM -A CLEAN TECHNOLOGY** 

Advantages of UASB over traditional aerobic processes

Technical aspects

Energy recovery from municipal sewage

Technology options for municipal waste water treatment

Case-studies

5 mld UASB treatment plant at Kanpur

Energy savings and biogas generation

Conclusions

Recommendations

14 mld UASB treatment plant at Mirzapur

Energy recovery

Financial aspects

15. Principles of Municipal Solid Waste Management

1. INTRODUCTION

Solid Waste Generation

Environmental Impact of Solid Waste Disposal on Land

Objective of Solid Waste Management

2. PRINCIPLES OF MUNICIPAL SOLID WASTE MANAGEMENT

Waste Reduction

Effective Management of Solid Waste

Functional Elements of Municipal Solid Waste Management

3. HIERARCHY OF WASTE MANAGEMENT OPTIONS

4. WASTE MINIMISATION

5. RESOURCE RECOVERY THROUGH MATERIAL RECYCLING

Sorting at Source

Centralised Sorting

Sorting Prior to Waste Processing or Landfilling

6. RESOURCE RECOVERY THROUGH WASTE PROCESSING

**Biological Processes** 

Thermal Processes

Other Processes

7. WASTE TRNSFORMATION (WITHOUT RESOURCE RECOVERY) PRIOR TO DI POSAL

**Mechanical Transformation** 

Thermal Transformation

Other Methods

8. DISPOSAL ON LAND

9. COMPONENTS OF MUNICIPAL SOLID WASTE MANAGEMENT SYSTEM

### 10. LINKAGES BETWEEN MUNICIPAL SOLID WASTE MANAGEMENT SYSTEM AND OTHER TYPES OF WASTES GENERATED IN AN URBAN CENTRE

11. MATERIALS FLOW CHART FOR MUNICIPAL SOLID WASTE MANAGEMENT SYSTEM (1000 t.p.d. WASTE GENERATION

16. Composition and Quantity of Solid Waste

1. INTRODUCTION

Terminology and Classification

Variations in Composition and Characteristics

2. DEFINITIONS AND CLASSIFICATION OF SOLID WASTES

**Definitions** 

- (i) Domestic/Residential Waste:
- (ii) Municipal Waste:
- (iii) Commercial Waste:
- (iv) Institutional Waste:
- (v) Garbage:
- (vi) Rubbish:
- (vii) Ashes:
- (viii) Bulky Wastes:
- (ix) Street Sweeping:
- (x) Dead Animals:
- (xi) Construction and Demolition Wastes:
- (xii) Industrial Wastes:
- (xiii) Hazardous Wastes:
- (xiv) Sewage Wastes:

Classification

3. COMPOSITION, CHARACTERISTICS AND QUANTITIES

**Need for Analysis** 

Field Investigations

Number of Samples to be Collected

Collection of Samples of Solid Waste

Composition and Characteristics

Characteristics of Municipal Solid Waste in Indian Urban Centres

Per Capita Quantity of Municipal Solid Waste in Indian Urban Centres

Estimation of Future Per Capita Waste Quantity

Relation between Gross National Product (GNP) and Municipal Solid Waste Generation

Rate of Increase liased on Experience in Other Cities

Seasonal Variations

**Physical Characteristics** 

Density

**Bulk Density Measurement** 

- 1. Material and apparutus:
- 2. Moisture Content
- 3. Size of Waste Constituents
- 4. Calorific Value

Chemical Characteristics

Classification

- (i) Lipids:
- (ii) Carbohydrates:
- (iii) Proteins:
- (iv) Natural Fibres:
- (v) Synthetic Organic Materials (Plastic):
- (vi) Non-combustibles:
- 4. CONCLUSION

- 17. Slaughter House Waste and Dead Animals1. INTRODUCTION
- 2 MA 2 MITH DE 25 THE D
- 2. MAGNITUDE OF THE PROBLEM
- 3. CLASSIFICATION
- 4. OPERATIONS DURING SLAUGHTERING OF ANIMALS

**Present Scenario** 

Slaughtering

Bleeding

Dressing

Evisceration

5. MEASURES PROPOSED TO IMPROVE THE SLAUGHTER HOUSE WASTE

**MANAGEMENT** 

Liquid Waste/Effluent

Collection of Blood

Improved Method of Dressing

Evisceration

Safe Disposal of Waste Products

**Odours Control** 

Modernisation of Slaughter House

Curbing Activities of Illegal Slaughtering of Animals

Provision of Dry Rendering Plants

6. CONCLUSION

18. Industrial Solid Waste

- 1. INTRODUCTION
- 2. THE PROBLEMS
- 3. INDUSTRIAL SOLID WASTE
- 4. DESCRIPTION OF IMPORTANT INDUSTRIAL SOLID WASTE

Coal Ash

Integrated Iron & Steel Plant Slag

Phosphogypsum

Red Mud

Lime Mud

Waste Sludge and Residues

Potential Reuse of Solid Wastes

5. WASTE MANAGEMENT APPROACH

Prevention-A Waste Minimisation Approach

Inventory Management and Improved Operations

Waste Management at Source

- 6. AREA OF APPLICATION OF SOME IMPORTANT INDUSTRIAL WASTES
- 7. CURRENT PRACTICE OF INDUSTRIAL SOLID WASTE MANAGEMENT

Collection and Transport of Wastes

Storage & Transportation

Disposal of Industrial Solid Waste

- 8. HEALTH CONSEQUENCES OF POOR INDUSTRIAL WASTE DISPOSAL
- 9. COLLECTION, STORAGE TREATMENT & DISPOSAL OF WASTES

Waste Segregation

Collection, Storage and Transport

**Combined Treatment Facilities** 

Disposal Methods

Landfills?

(i) Definitions

Why landfills?

Design:

## 10. CASE STUDIES Construction:

Closure & Post Closure:

Incineration

Manifest System

Post Treatment

**Back-transport** 

Monitoring

Record Keeping

11. LEGISLATION FOR MAN AGEMENT OF HAZARDOUS WASTE AND

CATEGORISATION OF HAZARDOUS WASTE

- 11. HANDLING OF HAZARDOUS CHEMICALS
- 12. INDUSTRIAL LOCATION
- 13. MANAGEMENT OF INDUSTRIAL SOLID WASTES COÂORDINATION (SPCBs & LOCAL BODIES)
- 19. Emerging Processing Technologies
- 1. INTRODUCTION
- 2. VERMICOMPOSTING
- 3. BIOGAS FROM MUNICIPAL SOLID WASTES
- 4. CONVERSION OF SOLID WASTES TO PROTEIN
- 5. ALCOHOL FERMENTATION 259
- 6. PYROLYSIS

Plasma Arc Technology/Plasma Pyrolysis Vitrification (PPV)

- 7. REFUSE DERIVED FUEL
- 8. HYDROPULPING
- 9. SLURRY CARB PROCESS
- 10. TREATMENT FOR RECOVERY OF USEFUL PRODUCTS
- 11. SUMMARY
- 20. Wastewater and Its Collection
- 1. ECOSYSTEM APPROACH TO POLLUTION CONTROL

Food Chains and Webs

Accumulation of Substances in Food Chains and Webs

Accumulation of Pollutants in Waterbodies

Species Diversity and Ecosystem Stability

Nature of Pollutants

Effects of Pollutants

Control of Pollutants

2. WASTE WATER CHARACTERISTICS

Municipal Wastewater

**Industrial Wastewater** 

Fluctuations In Flow and Composition

- 3. TYPES OF WASTES AND APPLICABLE RULES
- 4. PLANNING FOR WASTEWATER COLLECTION

Introduction

Data Requirements and Surveys

On-Site and Off-Site Disposal Systems

Sewer Discharge Standards

Proportion of Industrial and Domestic Wastes

Potential Health Benefits

New Approaches in Sewerage System Design

- 21. Principles of Reactor Design
- 1. REACTION ORDER
- 2. FLOW PATTERNS OF REACTORS

**Batch Reactors** 

Ideal Plug Flow

Ideal Completely Mixed Flow

3. ESTIMATION OF DISPERSION NUMBER, D/UL

**Use of Tracer Tests** 

Use of Empirical Equations

Cells in Series Parallel Arrangements

- 4. EFFECT OF SHOCK LOADS
- 5. ESTIMATION OF WASTEWATER TEMPERATURE IN LARGE REACTORS
- 6. FACTORS AFFECTING CHOICE OF REACTORS

Nature of the Waste

**Process Optimization** 

Other Factors

- 22. Principles of Biological Treatment
- 1. MICROBIAL GROWTH RATES
- 2. TREATMENT KINETICS
- 3. HANDLING OF SOLIDS
- 4. SLUDGE AGE AND HYDRAULIC RETENTION TIME
- 5. FOOD/MICROORGANISMS RATIO
- 6. BUILD UP OF SOLIDS IN SYSTEM
- 7. SUBSTRATE REMOVAL EFFICIENCY
- 8. TEMPERATURE EFFECTS
- 9. ESTIMATION OF FINAL EFFLUENT BOD
- 10. OXYGEN REQUIREMENTS

For Facultative and Flow-through Units

For Flow-through Systems with Recycling

- 11. NUTRIENT REQUIREMENTS
- 12. PHOSPHORUS REMOVAL
- 13. NITROGEN REMOVAL
- 14. CHOICE OF SLUDGE AGE
- 23. Mechanically Aerated Lagoons
- 1. TYPES OF AERATED LAGOONS

Facultative Aerated Lagoons

Aerobic Flow-through Lagoons

Aerobic Lagoons with Recycling of Solids

2. DESIGN OF FACULTATIVE AERATED LAGOONS

Substrate Removal Rate

Lagoon Mixing Conditions and Efficiency

Lagoon Depth

Solids in Suspension and Power Level

Oxygenation and Power Level

Anaerobic Activity In Facultative Lagoons

Performance

Sludge Accumulation

3. DESIGN OF AEROBIC FLOW-THROUGH TYPE LAGOONS

Substrate Removal and Solids Concentration

**Detention Time** 

Solids Concentration

Final Effluent BOD

Oxygen Requirements

Aeration Power and Power Level

4. DESIGN OF DUAL-POWERED AERATED LAGOONS

**Design Basis** 

**Retention Time** 

Performance Power Requirement

Sludge Accumulation

5. DESIGN OF AEROBIC LAGOONS WITH RECYCLING OF SOLIDS (EXTENDED

**AERATION LAGOONS)** 

6. CHOICE OF COMBINATIONS AND LAYOUTS OF UASBs, AERATED LAGOONS AND ALGAL PONDS

7. OPTIMIZATION TRIALS

8. CONSTRUCTION FEATURES

24. Power Generation Based on Distillery Spentwash

INTRODUCTION

THE BIOPAQ TECHNOLOGY

Pre-acidification/buffer tank

Sludge disposal

Biogas handling

**CASE-STUDY** 

**NEW DEVELOPMENT** 

Power generation scheme

CONCLUSION

25. Production, Use, and Disposal of Plastics and Plastic Products

1. SUMMARY OF KEY FINDINGS

2. TECHNOLOGICAL OVERVIEW

Manufacturing Resins

**Incorporating Additives** 

3. PRODUCTION AND CONSUMPTION STATISTICS

Historical Overview

**Domestic Production of Plastics** 

Import/Export and Domestic Consumption

Economic Profile of the Plastics Industry

**Sector Charscteristics** 

Market Conditions and Prices for Commodity Resins

Charactertics of Major Resin Types

Characteristics of Major Additive Types

4. MAJOR END USE MARKETS FOR PLASTICS

**Packaging** 

**Building and Construction** 

Consumer and Institutional Products

**Electrical and Electronics** 

Furniture and Furnishings

Transportation

Adhesives, Inks, and Coatings

5. DISPOSITION OF PLASTICS INTO THE SOLID WASTE STREAM

Plastics in Municipal Solid Waste

Plastics in Building and Construction Wastes

Plastics in Automobile Salvage Residue

Plastics in Litter

5 Plastics in Marine Debris.

26. Impacts of Post-consumer Plastics Waste on the Management of Municipal Solid waste

SUMMARY OF KEY FINDINGS

Landfilling

Management Issues

Incineration

Management Issues

Other Management Issues **Environmental Releases** Leaching of Plastic Polymers Leaching of Plastics Additives **INCINERATION** Introduction Number, Capacity, and Types of Incinerators Combustion Properties of Plastics Plastics Combustion and Pollution Control Incinerator Management Issues **Excessive Flame Temperature** Products of Incomplete Combustion (PICs) Formation of Slag Formation of Corrosive Gases 3 Environment Release **Emissions from MSW Incinerators** Plastics Contribution to Incinerator Ash **LITTER** Background Analysis of Relative impacts of Plastic and other Litter 27. The Potential for Divertable Plastic Waste 1. SCENARIO DEVELOPMENT 1 Scenario 1 2 Scenario 2 3 Scenario 3 4 Scenario 4 5 Scenario 5 2. ESTIMATED QUANTITIES OF DPW 1. Scenario 1 2.Scenario 2 3. Scenario 3 4. Scenario 4 5. Scenario 5 3. SUMMARY 28. Objectives and Action Items OBJECTIVES FOR IMPROVING MUNICIPAL SOLID WASTE MANAGEMENT Source Reduction **ACTION ITEMS: ACTION ITEMS:** OBJECTIVE 1: EVALUATE POTENTIAL FOR MINIMIZING PACKAGING **ACTION ITEMS:** OBJECTIVE 2: EDUCATION AND OUTREACH ON SOURCE REDUCTION **ACTION ITEMS: RECYCLING ACTION ITEMS:** Improving Recyclability of the Waste Stream Collection/Separation

**Environmental Releases** 

Litter

**LANDFILLING** 

Management Issues Landfill Capacity Landfill Integrity Processing

Marketing

**Public Education** 

Landfilling and Incineration

**OBJECTIVE 1: FURTHER EVALUATE ADDITIVES** 

**ACTION ITEM:** 

**OBJECTIVE 2: MONITOR PVC USE** 

**ACTION ITEMS:** 

**OBJECTIVE 3: IMPROVE DISPOSAL OPTIONS** 

**ACTION ITEMS:** 

OBJECTIVES FOR HANDLING PROBLEMS OUTSIDE THE MSW MANAGEMENT SYSTEM

Wastewater Treatment Systems/Combined Sewer overflows/Stormwater Drainage Systems

Wastewater Treatment Systems

**ACTION ITEM:** 

Combined Sewer Overflows

**ACTION ITEMS:** 

Storm water Discharges

**ACTION ITEMS:** 

Other Sources of Marine Debris

Vessels

**OBJECTIVE 1: IMPLEMENT ANNEX V OF MARPOL** 

**ACTION ITEMS:** 

**OBJECTIVE 2: REDUCE IMPACT OF FISHING GEAR** 

**ACTION ITEM:** 

Plastic Manufacturers, Processors, and Transporters

ACTION ITEMS: Garbage Barges ACTION ITEM:

Land- and Sea-Originated Litter

OBJECTIVE 1: SUPPORT LITTER RETRIEVAL AND CHARACTERIZATION

**ACTION ITEMS:** 

**OBJECTIVE 2: SUPPORT LITTER PREVENTION** 

ACTION ITEMS:
Degradable Plastics
ACTION ITEMS:

29. Recent Legislative and Regulatory Actions

LOCAL AND STATE ACTIONS

FEDERAL ACTIONS

IMPLICATIONS FOR PLASTICS RECYCLING

#### **About NIIR**

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