

# Understanding the Management Guidelines



# Why Are The Management Guidelines Needed?



- ◆ Onsite “treatment” codes are prescriptive
- ◆ Focus on public health rather than water quality
- ◆ Compliance based on construction, not performance
- ◆ Property owner responsible without accountability

# Central Sewerage Alone Can Not Meet Treatment Needs



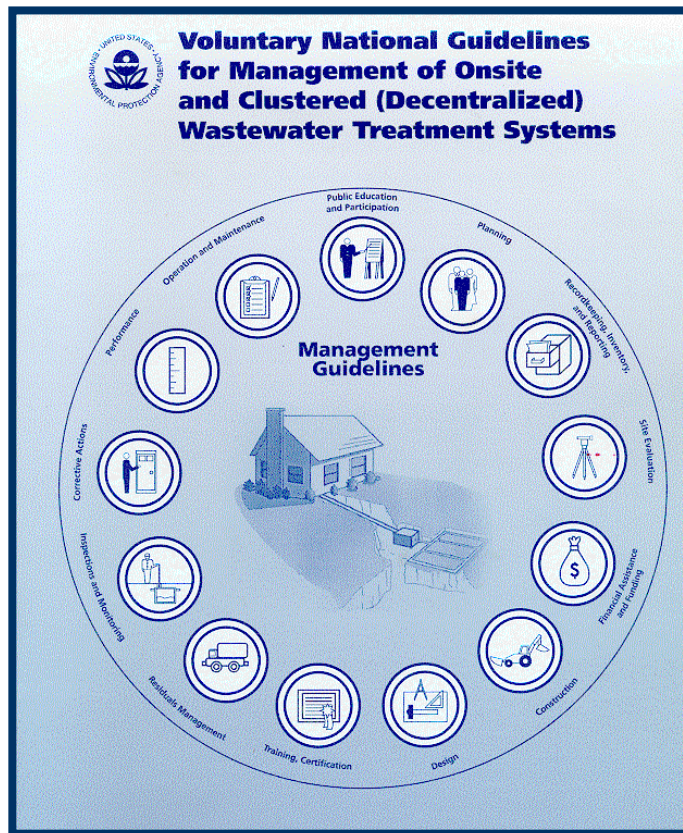
- ◆ Smaller economies of scale
- ◆ Household incomes typically lower
- ◆ Usually assigned lower priority for public financial assistance
- ◆ Operating costs typically high
- ◆ Annexation often required for regional treatment
- ◆ Gentrification of community often a consequence

# Gap in Regulatory Programs is a Barrier to Good Solutions

- ◆ Unsewered properties faced with either/or option rather than continuum of solutions
- ◆ NPDES programs frustrated by perceived inadequacy of onsite technologies and ineffectual enforcement
- ◆ Local onsite programs perceive NPDES programs to demand rigid and excessive responses to low risk situations



# Goals of the Management Guidelines



- ◆ To raise the level of onsite/cluster system performance through improved management programs
- ◆ To provide conceptual models that may be used by local units of government to assist them in upgrading their programs

# Objectives of the Guidelines

- ◆ Facilitate **improved management** of onsite/cluster systems
- ◆ **Institutionalize** the management concept at the state and local levels
- ◆ Promote **consistent management approaches**
- ◆ Establish **benchmarks** for minimum levels of management appropriate for the management goals
- ◆ Provide **flexibility to customize and upgrade** the management program
- ◆ Include both **surface and ground water discharges**

# Needs in Decentralized System Management



- ◆ Improved owner awareness
  - ◆ Appropriate application of technology to receiving environment
  - ◆ Sustained system performance to requirements
  - ◆ Effective and affordable options for sensitive sites
  - ◆ Licensed/certified practitioners
  - ◆ Integration of decentralized and centralized options in planning
-

# Highlights of the Management Model Options

- ◆ **Program Model 1: Homeowner Awareness**
  - Prescriptive system designs
  - Proactive maintenance encouraged through education and reminders
- ◆ **Program Model 2: Maintenance Contracts**
  - Enhanced treatment on traditional sites
  - Required maintenance contracts between owner and operator
- ◆ **Program Model 3: Operating Permits**
  - Entry to performance-based programs (operating permits)
  - Compliance based on performance rather than technology or design
- ◆ **Program Models 4 & 5: RME O&M or Ownership**
  - Responsibilities given to responsible management entity (4-third party O&M; 5-third party ownership)
  - Watershed-wide planning



# Elements in a Comprehensive Management Program

- ◆ Public Involvement
- ◆ Planning
- ◆ Performance Requirements
- ◆ Training & Certification/Licensing
- ◆ Site Evaluation
- ◆ Design
- ◆ Construction

APPENDIX A: MANAGEMENT MODELS

**MANAGEMENT MODEL 3: OPERATING PERMITS**

Objective: To issue renewable/revocable operating permits to system Owner that stipulate specific and measurable performance criteria for the treatment system and periodic submittals of compliance monitoring reports. The performance criteria are based on risks to public health and water resources posed by wastewater disposal in the receiving environment. Operating permits allow the use of clustered or onsite systems on sites with a greater range of site characteristics.

| PROGRAM ELEMENT                      | RESPONSIBLE PARTY                        | ACTIVITY*  |
|--------------------------------------|--|--|
| PUBLIC EDUCATION AND PARTICIPATION   | Regulatory Authority                     | <ul style="list-style-type: none"> <li>• Educate Owner/User on purpose, use, and care of treatment system.</li> <li>• Provide public review and comment periods of any proposed program and/or rule changes.</li> </ul>  |
|                                      | Service Provider                         | <ul style="list-style-type: none"> <li>• Be informed of existing rules, and review and comment on any proposed program or rule changes.</li> <li>• Participate in advisory committees established by the Regulatory Authority.</li> </ul>  |
|                                      | Owner/User                               | <ul style="list-style-type: none"> <li>• Be informed of purpose, use, and care of treatment system.</li> <li>• Be informed of existing rules, and review and comment on any proposed program or rule changes.</li> <li>• Participate in advisory committees established by the Regulatory Authority.</li> </ul>  |
| PLANNING                             | Regulatory Authority                     | <ul style="list-style-type: none"> <li>• Coordinate program rules and regulations with state, tribal, and local planning and zoning and other water-related programs.</li> <li>• Evaluate potential risks of wastewater discharges to limit environmental impacts on receiving environments during the rule making process.</li> <li>• Limit potential risks of environmental impacts from residuals management program and evaluate available handling/treatment capacities.</li> <li>• Inform local planning authority of rule changes and recommend its evaluation of potential impacts on land use.</li> </ul> |
|                                      | Developer                                | <ul style="list-style-type: none"> <li>• Hire planners, certified site evaluation, and designers to ensure that all lots of proposed subdivision plats meet requirements for onsite treatment prior to final plat.</li> </ul>  |
| PERFORMANCE                          | Regulatory Authority                     | <ul style="list-style-type: none"> <li>• Establish system failure criteria to protect public health, e.g., wastewater backups in building, wastewater ponding on ground surface, insufficient separation from ground water or wells.</li> <li>• Establish minimum maintenance requirements for approved systems.</li> <li>• Establish performance criteria necessary to protect public health and water resources for each defined receiving environment in Regulatory Authority's jurisdiction.</li> </ul>  |
|                                      | Owner/User                               | <ul style="list-style-type: none"> <li>• Operate and regularly maintain system in proper working order.</li> <li>• Operate system to comply with performance criteria stipulated in operating permit.</li> </ul>   |
| TRAINING AND CERTIFICATION/LICENSING | Receiving Board/<br>Regulatory Authority | <ul style="list-style-type: none"> <li>• Develop and administer a training, testing, and certification/licensing program for site evaluators, designers, contractors, operators, pumpers/haulers, and inspectors.</li> <li>• Maintain a current certified/licensed Service Provider listing.</li> </ul>  |
|                                      | Service Provider                         | <ul style="list-style-type: none"> <li>• Obtain appropriate certification(s)/license(s) and continuing education as required.</li> <li>• Obtain training from the manufacturer or vendor regarding appropriate use, installation requirements, and O&amp;M procedures of any proprietary equipment to be installed.</li> <li>• Comply with applicable federal, state, tribal, and local requirements.</li> </ul>   |
|                                      | Owner/User                               | <ul style="list-style-type: none"> <li>• When using third party services, contract with only the appropriate certified/licensed Service Providers.</li> </ul>  |
| SITE EVALUATION                      | Regulatory Authority                     | <ul style="list-style-type: none"> <li>• Codify prescriptive requirements for site evaluation procedures.</li> <li>• Codify criteria for treatment site characteristics suitable for permitted designs that will prevent unacceptable impacts on ground and surface water resources.</li> <li>• Establish defining characteristics for each receiving environment in the Regulatory Authority's jurisdiction.</li> </ul>   |
|                                      | Site Evaluator                           | <ul style="list-style-type: none"> <li>• Obtain certification/license to practice.</li> <li>• Describe site and soil characteristics, determine suitability of site with respect to code requirements, and estimate site's hydraulic and treatment capacity.</li> <li>• Comply with applicable federal, state, tribal, and local requirements in the evaluation of sites for wastewater treatment and disposal.</li> </ul>   |
|                                      | Owner                                    | <ul style="list-style-type: none"> <li>• Hire a certified/licensed site evaluator to perform site evaluation.</li> </ul>   |

\*Activities in bold are activities added to program elements from the preceding Management Model.

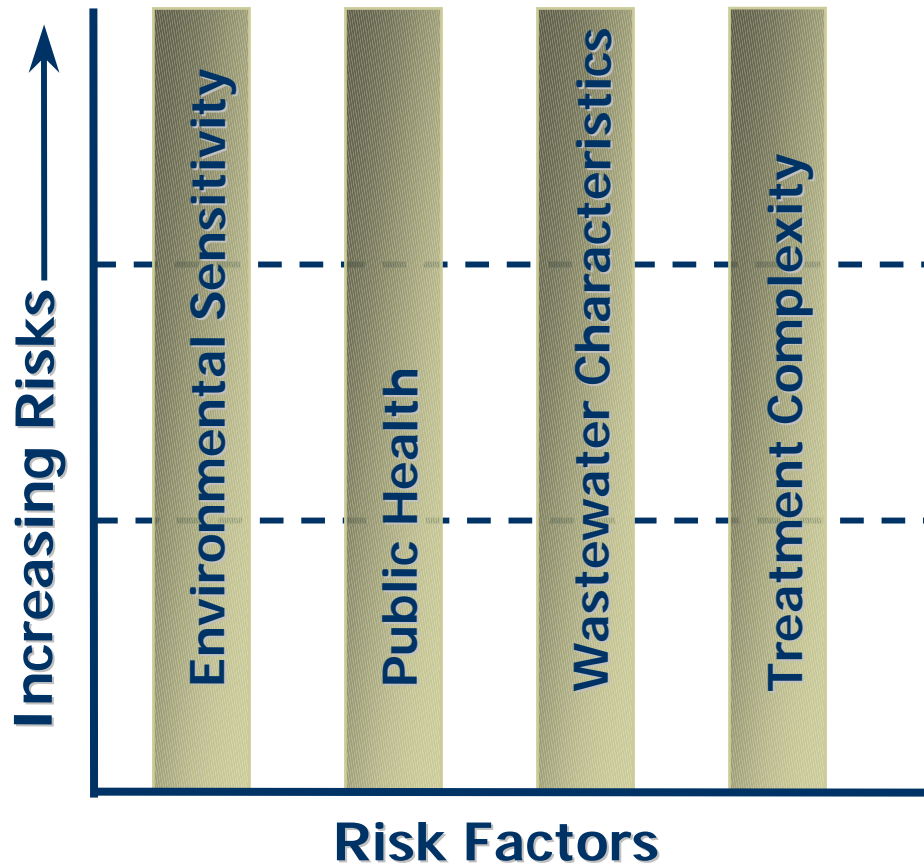
39

- ◆ O&M
- ◆ Residuals Management
- ◆ Inspections/Monitoring
- ◆ Corrective Actions
- ◆ Record-Keeping/Reporting
- ◆ Financing

# Selecting an Appropriate Management Model

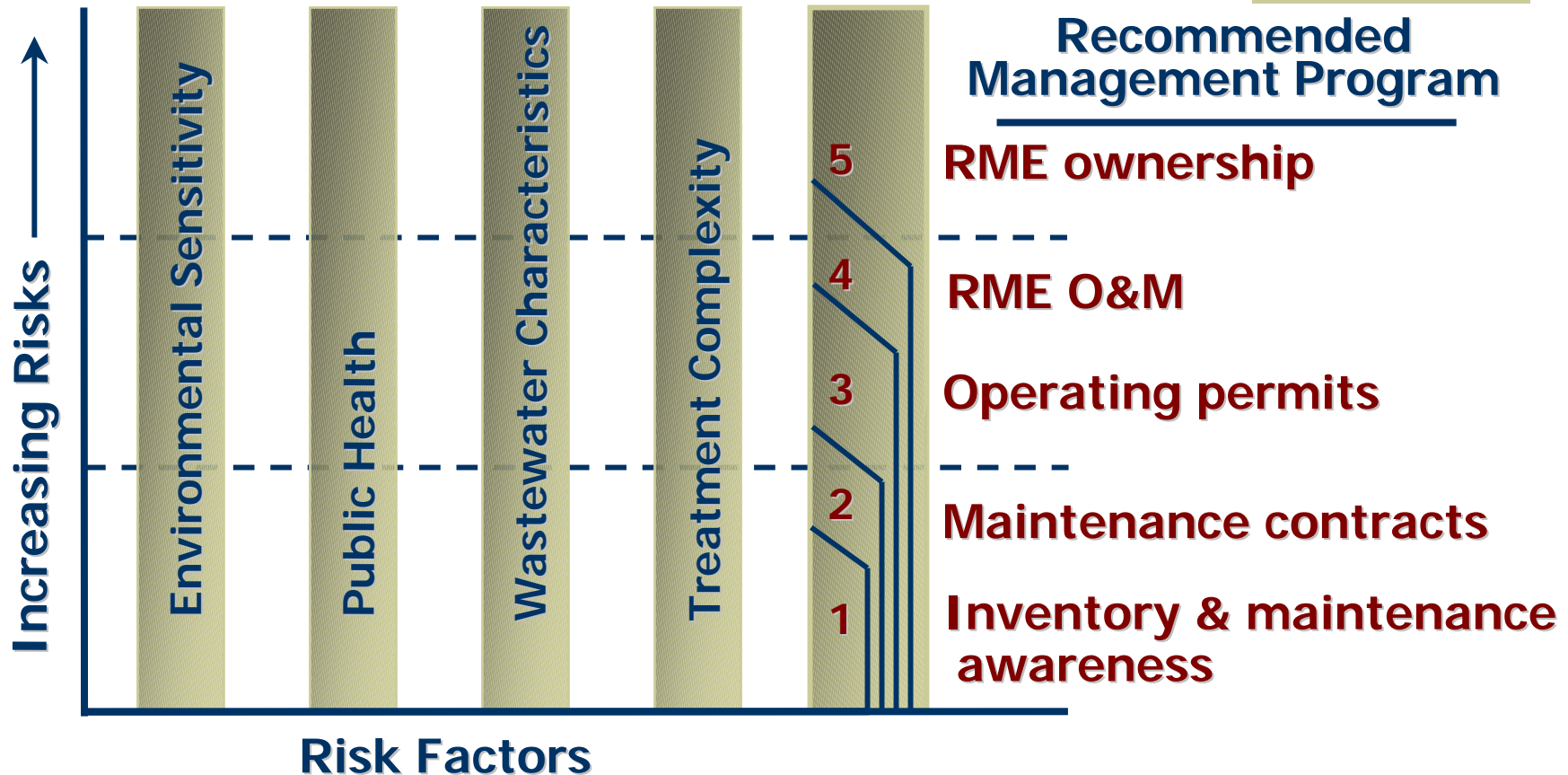
- ◆ Models represent basic approaches, not rigid programs
  - Intended to establish a minimum program level
  - Meant to be customized to meet needs and resources of the jurisdiction
  - *e.g.* use of operating permits (Model 3) to monitor maintenance contracts (Model 2)
- ◆ Two types of models presented
  - Regulatory only (Models 1-3) with private ownership and management
  - Regulatory/RME programs that may overlay Models 1-3 or be supplant private property owner responsibilities

# Application of Management Programs



- ◆ One program is not meant to be better than another except as they relate to potential risks
- ◆ As risks increase, management controls must be more rigorous to maintain the risks to public health and water quality at an acceptable level

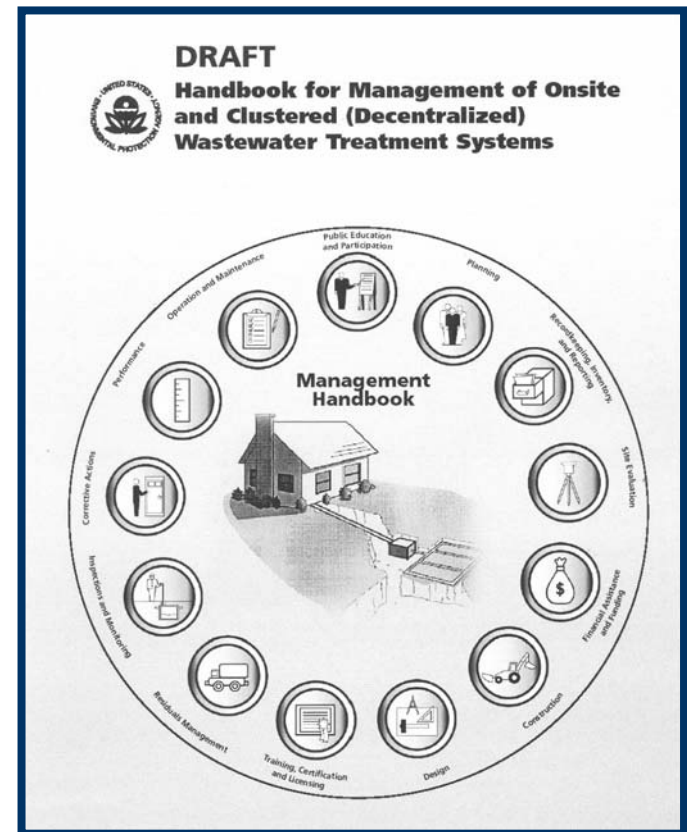
# Application of Management Programs



# Management Handbook

## Major features

- Public awareness and education tools
- Homeowners' Guide
- Case studies of management programs
- Database for inventories
- Examples of funding
- Model codes and ordinances
- Septage management examples



# How Can the Guidelines be Used?

- ◆ To evaluate and improve existing programs
- ◆ To determine appropriate management structures that will provide the necessary powers for effective implementation
- ◆ To obtain model codes and ordinances
- ◆ To learn about a variety of programs already implemented in other areas of the country
- ◆ To receive “tools” that can be helpful in providing services and their administration

# Approaches to Guidelines Implementation

- ◆ Implement according to need
  - Customize program based on need and existing program status
  - Implementation may be phased  
*e.g.* prioritize “hot spots”
  - Need not implement same level of program throughout jurisdiction
  - Do not raise risk factors until controls in place

# Planning Element Options

- ◆ Models 1&2
  - Coordination of program with regional planning office
- ◆ Models 3&4
  - Identify critical areas requiring higher levels of treatment
- ◆ Model 5
  - Area-wide planning to determine most cost-effective approach to providing treatment services





# Compliance Inspections & Monitoring



- ◆ Model 1  
Owner awareness, ‘pre-cover up’ and periodic inspections
- ◆ Model 2  
Owner contract with licensed provider
- ◆ Models 3&4  
Specific and measurable performance requirements and compliance reporting
- ◆ Model 5  
Area-wide aquifer and watershed monitoring with adjustments as necessary

# Implementing a Successful Program

- ◆ It's all or nothing!
- ◆ Make a commitment
- ◆ Demonstrate commitment
- ◆ Involve stakeholders
- ◆ Implement a public information campaign
- ◆ Investigate statutory authority
- ◆ Temper expectations

