

Potential Approaches and Benchmarks for the Inspections Element of CZARA Operating Onsite Disposal Systems Management Measure

In 1993, this management measure was written to provide guidance that can be used as a foundation for protecting and restoring coastal waters from pollution that may result from discharges from Onsite Disposal Systems (OSDS). The Operating OSDS management measure was written to promote the establishment and implementation of policies and programs that result in the proper operation and maintenance, replacement or retrofit of systems that are failing or contributing pollutants that negatively affect coastal water quality; there is particular focus on OSDS inspections to ascertain whether systems are failing. In determining whether State coastal nonpoint programs are consistent with the OSDS Management Measure, EPA and NOAA have accepted a variety of state approaches, recognizing that each state program is unique and that existing policies, programs, funding, and staffing influence how any given state addresses and implements this management measure.

In the review process, NOAA and EPA will look for documentation that the state has program(s) or a set of activities in place that are intended to identify OSDS that are failing or otherwise inadequately sited, designed, maintained or serviced to prevent the discharge of pollutants to coastal waters.

The state may elect to use any combination of programs, policies or other mechanisms that achieve the goals stated above regarding the proper operation and maintenance of OSDS. States can use two general approaches or a combination of these approaches to document consistency with the inspections element of the Operating OSDS Management Measure:

General Approach 1: Document how the use of any combination of voluntary or regulatory approaches result in inspections of a **significant majority**ⁱ of OSDS throughout the coastal nonpoint program management area over a 15-year period to ascertain whether they are failing or otherwise inadequately protect receiving coastal waters.

General Approach 2: Document how a state will implement a targeted approach that systematically identifies criteria for prioritizing the OSDS that will be the focus for inspections over a 15-year period based on the potential that they may be inadequately sited, designed, serviced, failing, or otherwise determined to be linked to water quality or public health problems within the coastal nonpoint program management area. The approach should address **the vast majority**ⁱⁱ of the prioritized systems.

Under **Approach 1** the following types of programmatic elements or voluntary approaches may be identified to demonstrate that a **significant majority** of OSDS in the coastal nonpoint program management area are inspected over the 15-year implementation period. This demonstration can be based on one or more of the following means: state or locally determined protocols, criteria, programs, and funding mechanisms, and/or common practices by realtors, property lenders, buyers and/or owners. Specific components of this approach could include:

- requirements for operating permits for some or all OSDS based on system type, location, or other relevant factors;
- requirements for service contracts for alternative OSDS based on system type, such as aerobic treatment systems (ATUs), based on manufacturer, state or county recommended maintenance/inspection frequencies;

- requirements for inspections of systems at time of property transfer;
- requirements for inspections upon change in occupancy;
- requirements for inspections at the time of significant system retrofit, modification or system replacement;
- requirements for OSDS to be pumped out on a frequency of five years or less and for pump-out activity to be tracked;
- voluntary approaches documenting that, as properties change hands, a **significant majority** will have OSDS inspections at the time of ownership changes, (e.g., buyer/seller requests, realtor recommendations, education efforts for both realtors and clients, or lender requirements); these efforts are guided by goals and interim milestones over the 15-year implementation period and back-stopped by the state's enforceable policies and mechanisms.
- outreach and educational efforts by the state or others that are anticipated to result in local government ordinances, binding guidance, certification of realtors or system owner behavior change such that OSDS are undergoing periodic inspections to ascertain failure; these efforts are guided by goals and interim milestones over the 15-year implementation period and back-stopped by the state's enforceable policies and mechanisms.

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Under **Approach 2** - a systematic targeted approach. The state documents criteria for systematically targeting a prioritized set of OSDS for inspection based on their potential to adversely affect coastal water quality, i.e., systems that are prone to failure or inadequately sited, designed, or maintained to protect living coastal resources and human health. The prioritization process identified should be consistent with NOAA and EPA's guidance on targeted approaches presented in the 1998 Final Administrative Changes Memo. In developing a systematic targeted approach, states could use the criteria below for prioritization of OSDS categories, or other systematic criteria of the state's choosing:

- systems in watersheds or subwatersheds with impaired water quality that are or may be associated with OSDS pollutant discharges;
- systems sited in a way that increases potential risks to water quality or public health in case of a failure, e.g., conventional systems sited on high groundwater tables with inadequate separation distance, karst geology, sandy soils, floodplains, poorly draining soils, steep slopes, insufficiently developed/thin soils;
- systems in older developments, e.g., > 25 years old, which may have passed the drain field's useful life expectancy and/or pre-date existing state or county standards for system type and site conditions appropriate to protecting receiving waters and public health;
- systems in areas with known high failure rates;
- systems located in areas with a higher probability of failure due to identified factors that may be institutional, programmatic, socioeconomic, or environmental;
- systems within identified zones of protection based on risk management, e.g., proximity to surface waters. Priority could be differentially assigned based on the distance from surface water bodies or other identified site conditions, (e.g., higher emphasis for inspections on systems within 200' of a surface water body and secondary emphasis on inspections for systems within 201-500' from surface waters);

- Addressing OSDS with designs that are particularly prone to failure including:
 - o innovative or alternative systems such as ATUs, recirculating sand filters and sequencing batch reactors, which require significantly more frequent inspections than conventional OSDS to ascertain whether they are failing (semi-annually, according to several EPA publications and fact sheets);
 - o system designs that do not provide basic wastewater treatment necessary to protect human health or coastal waters, such as straight pipes and cesspools;
- drinking water sources at potential risk from OSDS;
- areas with higher system densities where cumulative loads may present increased environmental or public health risk, (e.g., areas with >4 conventional OSDS per acre).

Under Approach 2 the state can systematically identify a subset of priority OSDS and/or geographic areas for inspection focus during the 15-year implementation period. Any of the program components and approaches listed under Approach 1 above can be used to address the subset(s) of prioritized OSDS. Given the ability to narrow the universe of OSDS under this targeted approach, the state's program should aim to inspect the **vast majority** of OSDS in prioritized areas or categories.

Reminder about Voluntary Approaches: When voluntary approaches are used as part of either of the above approaches, states must meet all requirements for using voluntary approaches to satisfy the CZARA management measures. This includes describing how the state will track and evaluate voluntary inspections and providing a commitment to use the back-up authority to ensure inspections occur, when needed.

Note: If the state currently lacks a system in place to implement this management measure, NOAA and EPA are receptive to commitments to use funding sources over the 15 year implementation period such as CWA Section 319 funds, CZMA Section 306 funds where available, or other funding sources at the state or county level to implement either a coastal nonpoint program management area inventory program or a targeted inspection program that addresses the significant majority of systems of concern identified by the state.

ⁱ Under Approach 1, a "significant majority" of OSDS in the coastal nonpoint program management area should be addressed via the program components. There is no required minimum or maximum percentage of OSDS indicated in the management measure; states seeking a point of reference may consider two-thirds of OSDS as a starting point for "significant." In making an evaluation NOAA and EPA will consider the components and strengths of the state's overall strategy in assessing the impact on OSDS across the coastal nonpoint program management area.

ⁱⁱ Under Approach 2, Targeting, the "vast majority" of OSDS in the prioritized areas or categories should be addressed via the program components. There is no required minimum or maximum percentage of OSDS indicated in the management measure. NOAA and EPA will consider the state's overall strategy in assessing the impact on OSDS across the targeted areas or system types.