

Deliberative - Draft Copy
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Remedial Priority System, N.J.A.C. 7:26F
Options Paper

Issue: The Remedial Priority System (RPS) rule that ranks sites is scheduled to expire on August 25, 2005.

Action Needed: Management decision on whether we should allow existing rule and prioritization system to expire, keep the rule and system but make some changes to it or develop a completely new approach through a new rulemaking. Once management determines the approach, we can make provide a more detailed briefing and recommendations on the specific approach selected.

A. Background

1. Statute

A 1982 amendment of the Spill Act (N.J.S.A. 58:10-23.16) required the Department to “prepare and adopt a master list for the cleanup of hazardous discharge sites. ...” master list shall comprise an inventory of all the known hazardous discharge sites... identified as in need of cleanup, or which will be cleaned...and a ranking, based on criteria established by the department, of the sites in the order in which the department intends to clean up the sites. “... department shall review the master list at least once every six months and modify it as necessary.”

2. Regulation

In 1996, the RPS rule was adopted. **RPS is a numeric scoring system that resembles EPA’s HRS. It is a site specific approach that assesses risk on a chemical-by-chemical, medium-by-medium basis. RPS was designed to be consistent and reproducible.**

The rule states that the system would be used to rank unassigned sites to prioritize them for remediation with public funding.

The rule text states that the Department will 1) identify sites to be scored, 2) generate a draft score, 3) finalize each score, once the Department plans to spend public money..., by issuing a Spill Act Directive as appropriate. To generate a final score the Department will 1) inspect the site, 2) correct the draft score as necessary and 3) provide notice of the final score to the RP with a Spill Act Directive or other appropriate means. The rule does not address if or how the Department would publish the RPS list.

3. Implementation of the Existing Rule

The RPS rule was written to address one specific part of 58:10-23.16 namely “a ranking, based on criteria established by the department.” The RPS was to be the Department’s “worst first” approach for unassigned cases.

In 1996 a group was formed to score unassigned cases. The list (~ 6,000 sites) of unassigned sites was scored. SRWM did not inspect sites or provide final notices to the Responsible Parties (RPs) as outlined in the rule. The list of scored sites was not used to select sites for public funding. Sites were/are selected for publicly funded remediation primarily based on enforcement priorities. The Department has never published a list of the ranked sites.

The rule was readopted with technical amendments in 2000. Both the original proposal and the readoption discussed the Department's intent to use the list to select sites for public funding, included a public comment period, and a statement of Department's firm commitment to use the system.

SRWM has used the RPS to score selected assigned cases. In 2002, the Department was subject to a Statute of Limitations by which the Department had to take action or would lose its ability to file an action against a responsible party. With the date for taking action approaching, the Department needed a manner to prioritize cases for the filing of complaints. The RPS was used in 2002 to prioritize assigned (active) cases for potential enforcement action due to the Statute of Limitations legislation. The statute was amended to extend the date. We have this list but have not published it. New active cases coming into SRWM have not been scored since that date.

4. Establishment of Internal Team to Review RPS system

In 2002, Assistant Commissioner Van Hook established a team to examine the existing RPS system. The goal was outlined in a document and stated that the "Targeting team shall review the existing Remedial Priority Scoring system and make recommendations to Senior Management for potential alternative mechanisms for prioritizing cases for public funding. Once senior managers have formulated the policy, the Office of Accountability shall identify and develop any policies needed to implement the recommendation."

The team produced a draft report which was presented to the Assistant Directors in early 2004. The draft report recommended a tiered approach to ranking sites. The approach emphasizes that the effort to rank a site should be proportionate to the severity of the problem. (see attachment)

B. Issues

There are many issues associated with the interpretation of the statutory requirements, the regulations, the manner in which the Department should prioritize cases and with the existing processing of cases. The following are some we considered necessary for the discussion.

1. Publishing a list or ranking

- There is disagreement as to what the statute requires. Historically, SRWM has interpreted it to mean that we only have to rank the sites that we are not working on. Some people interpret it as a requirement to rank all our sites.
- SRWM had a concern regarding publishing a list of all sites. Since we cannot work on all

sites, if a site was near the bottom, a person might delay or stop work since they knew it was less of a priority.

- The Department has never published a list as required by the statute, nor have we ever reviewed or periodically re-published the list. A position that has been taken is that because the list was never “finalized” it did not have to be published. We periodically get requests from the public for the list but have not provided it based on the fact that we do not have a finalized list.
- The Department has not ranked sites since approximately 2000. The group that ranked sites was disbanded so there is no group of people assigned to do this work.
- There is a lot of debate on how we should be ranking sites. There is no perfect system that everyone agrees on.

2. How to Rank Cases

- There is disagreement as to what the statutory requirements are, as well as the best manner to meet them. The existing system is intended to be worst first. Some do not feel it meets that standard. Others feel it should be a more risk based system.

3. Problems with implementation of any system

- There is no SRWM-wide system for prioritizing cases. The implementation of any prioritization system would have major ramifications related to workload (rulemaking and implementation) and could significantly change the existing case management strategy. The extent of impacts depend on the option selected.
- Other priorities will conflict with a risk-based prioritization system: property transactions, BDAs, other enforcement priorities, EPA, political etc.

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- Currently, the universe of SRWM cases (assigned to a case manager, assigned to a program or awaiting assignment) that is tracked in NJEMS is questionable. To implement a prioritization system SRWM would need to improve existing data quality and mandate proper data input and maintenance by case managers and other staff.
- Influences and priorities from outside SRWM may effect internal priority setting. Public awareness of environmental issues is increasing due in part to the Department’s outreach efforts with public participation and data sharing with projects like i-Map. This increased awareness will likely result in the zzzzzzzwant to weigh in on the development and implementation of a SRWM priority system. Other Department priorities such as smart growth initiatives and watershed management may have priorities that are not consistent with a purely risk-based ranking system.

C. Options

1. Readopt without change

The rule will remain in effect unchanged. The Department would have to respond to public comment and would actually implement the system.

Pros: We can accomplish this option prior to the rule expiring. We have experience with this approach. It would require small amount of resources to develop the rule.

Cons: Staff resources to rank the sites, issuance of directives, site visits, and using the ranking for public funding.

Correlation between the RPS score to a formal risk assessment is only moderate to poor. RPS does not distinguish between immediate and long term risks. The toxicity criteria is based on long-term chronic exposures. If high risk sites are ranked with low risk models the risk may not be identified. In addition, RPS scores sites based on the data available in the site file. In practice, the site score is reflects the quality of the investigation. Often, the greater the amount of data on the site (regardless of severity), the higher the score. Sites that are data deficient will tend to receive a lower score because the system defaults to a no risk scenario. RPS does not account for the volume or mass of contamination.

2. Readopt with amendments

Before the rule expires, publish the existing rule but make amendments to improve existing technical shortcomings.

Pros: This option would resolve the strategy for prioritizing sites and resolves technical inadequacies. The Director, Division of Remediation Support has already been contacted by OIRM regarding using existing databases for this purpose and putting our data on the web page.

Cons: This approach will take more time to develop the rule. Depending on the level of changes, it may be difficult to accomplish within the one year timeframe.

3. Allow the rule to expire and announce new intent There are two ways that the Department could allow the rule to expire. We would take no action on the existing rule, let the date pass, and allow it to expire. The rule after that date would no longer be in effect. Because the Department has statutory requirements to have a list and rank sites, the Department may want to simultaneously propose another rulemaking that states a new approach that the Department would take. Or the Department could publish a notice stating that we intend to allow the rule to expire and intend to modify our approach. For example, the Department could an Interested Party Review such as SRWM has done with the Soil Standards.

Pros: If we do not think that the existing RPS system is adequate, this option would establish a new system. Developing a system would take substantial time. Publishing a notice would also give the Department time to propose something new. It is expected the public would be

Deleted: The Department could keep the existing rule in effect. To accomplish this, prior to the rule expiring, the Department would be required to publish the following statement in the NJ Register "The Department has evaluated the rules and has determined that they are necessary, reasonable and proper for the purpose for which they were originally promulgated."

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Deleted: In addition, it is likely that the publicly funded program would have to shift priorities and more cases would be steered toward ACOs. There is disagreement as to whether RPS is an adequate system because the RPS may not adequately assess risk. If the statute is found to require the prioritization of all sites, the re-adoption of the existing rule would not be adequate.

Deleted: Note: If this option is selected the SRWM rule facilitators could draft the launch memo further outlining the approach and raise any issues at the Wed meetings. ¶

Deleted: Minor amendments could be to include vapor intrusion exposure and volume of contamination in our assessment. The rule could also be amended to allow the system to be used to rank all sites if it is determined to be necessary/appropriate. ¶

Deleted: Major amendments could be to include those listed above and the development of a computer based system that would be able to integrate and compare new and existing databases to assess risk posed by contaminated sites. This would result in a numeric score for ranking sites. **Note:** For more information regarding this approach see attachment 1. If this approach is selected, we could provide more details in a briefing or launch memo. ¶

interested in these discussions. We could create a system of prioritization that is understandable to the public.

Cons: Since the Department would not have a formal risk-based system to prioritize sites on the day the rule expired, it would be a violation of statutory requirements. This approach will be difficult and will result in much debate. There will never be complete agreement on the method for how the Department ranks sites both internally, from the regulated community and the general public. It will be a significant effort to develop a new process. Depending on the approach selected, it could require the involvement of groups outside SRWM. It will also be a major undertaking to develop rules and the processes and training to implement it.

4. A blend of the options above. Have a rule in place by either adopting the rule “as is” (option 1) or amending rule (option 2) and simultaneously announcing our intent to propose new system through an Interested Party review (option 3)

Since this is a blend of the above options, it has the same positives and negatives as listed above. It also has these additional pros and cons:

Pros: It meets the statutory commitment since the rule does not expire. If it takes longer than expected to develop a new system and implement it, the Department will at least have some system in place.

Con: It will be a great deal of work for a temporary system. How temporary the system and how much burden it will be will depend upon how long it takes us to do the new rulemaking. Option 2 and 3 will require more work to develop a rule. However, in selecting either option, the full implementing the system, will be a process SRWM is not presently doing. Therefore, it will require new staff to perform the scoring, staff to perform site visits, issue directives and changes to the order of cases that the case managers are actually working on.

Deleted: Note: If you want to proceed with this approach, we could present the work of the task force as a possible option (see attachment 2).¶

Is this needed?

Another section of the 1982 amendments (N.J.S.A. 58:10-23.22) directed the formation of the Hazardous Waste Advisory Council. The council was to make recommendations to the Legislature regarding the development of Hazardous Substance Contingency Response Master Plan to be adopted by the Department. The Master Plan was to develop procedures for many aspects of forming and administering a cohesive site remediation program. The Council was established and did develop such recommendations. We are unsure if anything was formally done with the plan.

Many of the Council’s recommendations contained in this report are interesting and could still be used to inform SRWM policy decisions. Specifically, the Councils recommendation on.....

Attachment 1

Electronically-Based Remedial Priority Decision Support System (DeFina)

An electronically-based remedial priority decision support system (DSS) could be developed to better assess which sites pose the greatest risk to public health and the environment. Such a system would apply Geographic Information System (GIS) spatial analytical tools, digital contaminated site data and the preparation of a probability grid, to develop a numeric score to identify high priority sites. A DSS could build on criterion and concepts already existing in the Remedial Priority System rule placing emphasis on criterion that can be evaluated using existing and new DEPs GIS databases. Unlike the existing RPS system that ranks one site at a time, an electronically-based system would be capable of ranking many sites simultaneously thus allowing us to evaluate areas such as whole BDAs and watershed regions. Since the RPS rule was first adopted there has been a significant increase in the number and quality of geographic data resources that can identify potential receptors and exposure pathways associated with contaminated sites. At least 100 GIS data sets are now available for use in a DSS for remedial priority ranking. A risk-based strategy could also be used to set priorities for SRWM's enforcement program or other uses.

Pros

- An electronically-based system would rank sites more accurately, objectively and consistently, and thus be more defensible.
- The system would be flexible so that a single site or many sites within a region could be evaluated. Evaluating multiple sites would allow us to better study regional impacts on grounds and surface water or could be based on any other criteria.

Cons

- The development and implementation of an electronically-based system would require the commitment of significant resources including SRWM staff; outside IT specialists for development and ongoing support; and dedicated hardware and software.
- Because an automated system is only as good as the data on which it is built, a certain amount of error is inherent. Trained staff would have to verify output from the system.

Attachment 2
Overview of Remedial Prioritization
Ranking Hazardous Waste Sites (Kelman)

Public opinion polls indicate concerns of the risks posed by hazardous waste sites in the state. The polls also indicate the public wants greater public participation in the departments decision making process. Paradoxically at the same time, the public's trust in government is declining. Therefore, the assumptions and policies used to develop risk based priorities must be transparent, scientifically based, and reasonable.

Objective of Study: To ensure available funds and resources are directed to the highest risk sites, a study to review, evaluate and make recommendations, if appropriate, to improve the decision-making processes used in the remedial program was conducted.

Primary Findings

The study's findings revealed that although the Department's policy calls for addressing the "worst sites first", risk is not the primary factor in setting priorities. To the contrary, enforcement and remedial resources are generally dictated by statutory and court ordered deadlines which prevents the program from reordering their priorities by risk.

Administrative, legal and technical elements combine to determine priority for effort and expenditures on contaminated sites. An examination of the outcome of the existing process for prioritization has shown that many sites known to present the most risk to human health and the environment have had no effective remediation.

PROBLEM DESCRIPTION

Three main problems with the current prioritization methods must be addressed:

Risk is not emphasized in setting remedial priorities. Site-specific ranking methods have inherent weaknesses. The Remedial Priority System (RPS) assesses sites based on long-term chronic exposure and does not address the potential hazard of high concentrations of contaminants which could result in immediate and irreversible health effects. In other words, if high risk sites are ranked with low risk models they may not be identified as a high priority. In addition, RPS scores sites based on the data available in the site file. In practice, the site score is reflects the quality of the investigation. Often, the greater the amount of data on the site (regardless of severity), the higher the score. Sites that are data deficient will tend to receive a lower score because the system defaults to a no risk scenario. RPS does not account for the volume or mass of contamination,

Lack of integration and coordination between programs that regulate different aspects of the same problem prevents an efficient and effective approach to reducing risk.

Lack of public participation in the remedial process puts the Department at risk of making assumptions that do not reflect the true nature of the site. Thus, the relative risk may be substantially higher. Provisions in the CWA, SDWA, CAA, RCRA, and CERCL mandate public participation and allow for civil lawsuits against violators.

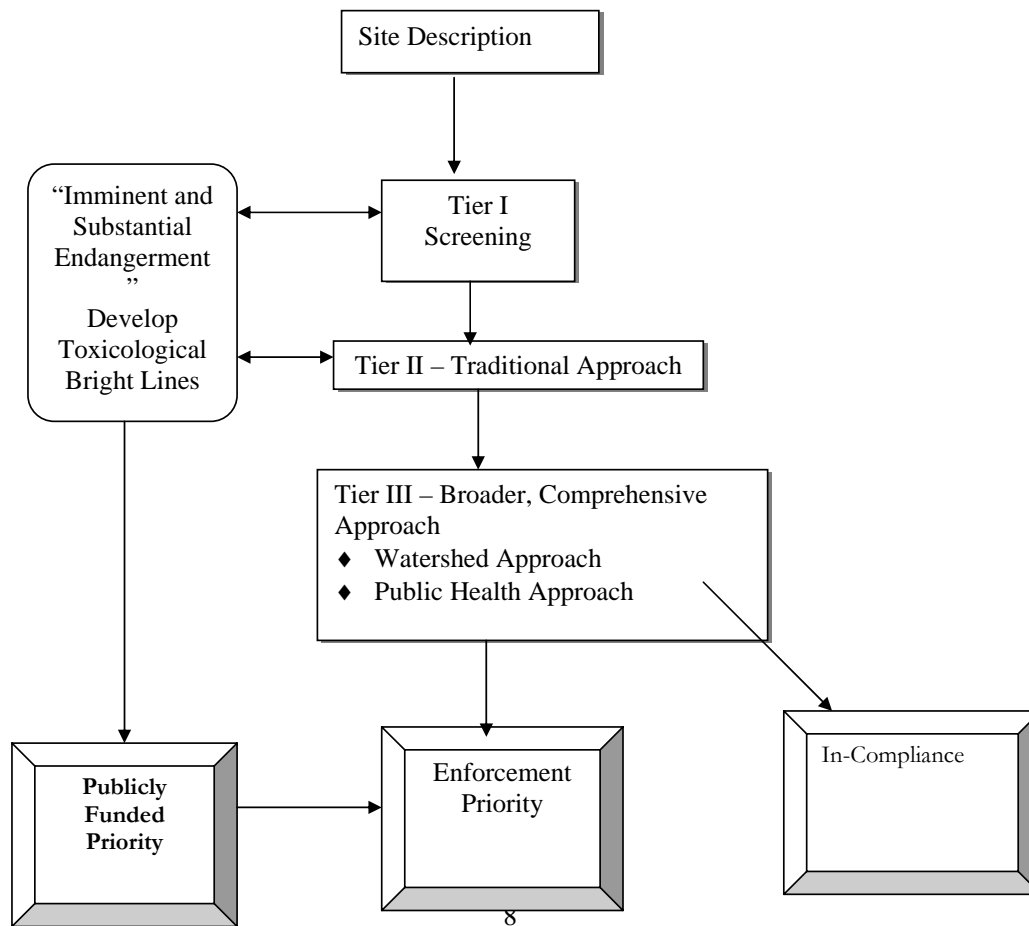
Recommendations

The recommendations presented is designed to reduce the effect of fragmentation of information, and remove some of the barriers created by fragmentation of regulations.

A graduated or tiered approach geared to the level of risk to the environment and human health presented by individual contaminated sites. A graduated approach should enable regulatory resources and compliance costs to be targeted more in proportion to risks to the environment and human health; deliver a more consistent, efficient and cost-effective regulatory system; and emphasis the polluter pays principle.

The proposed framework outlined below is a three tiered approach. It breaks down extremely detailed, complex and resource-intensive process into a practical decision-making tool. The approach minimizes unnecessary effort and reduces the chance of overlooking potentially significant risks. This framework is conducted in collaboration with stakeholders.

General Outline of Tiered Approach to Remedial Ranking



Implementation

Key to the successful implementation of the remedial priority framework is integration of regulation and public health. Review of the public health component in each environmental statute, reveals that for the most part they reinforce each other.

I. Regulatory Coordination Group

The Department's environmental programs may encounter legal and administrative hurdles when implementing department-wide priorities. The creation of a unified regulatory group offers the opportunity to remove the major barrier that has fragmented organizational structure of the Department.

II. Coordination with the Department of Health

Regulatory and public health agencies have important and complementary roles to play in setting policies for environmental health protection and risk management. In general, these two communities do not interact sufficiently, and the connections between environmental exposures and public health are not well established. By establishing an Inter Department Coordination group many environmental pollution problems can be identified by their public health contexts. Specifically: Link studies of exposure and studies of adverse health or ecological outcomes. Determine regional differences in disease prevalence and disease incidence trends and risk factors. Develop good baseline and surveillance information about incidence rates of diseases specifically linked to environmental causes.

III. Technical and Science Advisory Board

Establish a Technical Group comprised of a group of senior scientists and engineers to coordinate approaches to Department-wide priorities

Subgroup: Integrated Database Management Team

The state's numerous environmental programs generate high quality information and data that is fragmented and not easily accessible. The recommendation to establish an Integrated Database Management Group that would mirror the Carnegie Commission's recommendation to create a National Environmental Database. (March, 1997) Technological tools now exist for unifying and integrating data generated by disparate programs at numerous programs. For example, geographic information system (GIS) technologies permit the creation of geo - spatial digital databases encompassing geological, hydrological, biological, and cultural information and thus allow for analysis of multidisciplinary data sets that were previously incompatible.

Over the past decade the NJDEP has been significantly expanding its base of detailed geographic and contaminated site data; these data elements are unique in that they are digitally available and can be integrated with each other. The geographic data is available through NJDEPs Geographic Information System (GIS) and contaminated site data compatible with the GIS is being collected by the Site Remediation Program (SRP). As we develop geographic baseline information about the environment and become more knowledgeable of exposure pathways our ability to predict an impact or the potential of an impact by contaminants originating from a site is improved. At this time the quantity and quality of these data elements are considerable, enough so that they can be used to develop (begin development) of a comprehensive data management tool designed to facilitate site remedial ranking priorities.