

New Mexico Neglected Contamination Sites Implementation Plan

Executive Summary

Protecting groundwater quality is essential to New Mexico's water future. Unfortunately, groundwater is threatened by sites with neglected contamination in every region of New Mexico. These sites are locations with known or suspected contamination that is not being cleaned up because a viable responsible party cannot be identified, and the site cannot receive cleanup funding assistance through an existing state or federal program.

The New Mexico Environment Department (NMED) has compiled an inventory of 302 sites with potential neglected contamination located in both urban and rural areas across the state. Contaminants present at these abandoned sites include petroleum hydrocarbons, chlorinated solvents, heavy metals, and polychlorinated biphenyls (PCBs). Unlike many other states, New Mexico does not have a state fund to remediate these sites (except petroleum tank sites), so the contamination at neglected contamination sites poses ongoing water quality, human health, social, economic, and safety risks to nearby communities.

Addressing neglected site contamination will increase New Mexico's resiliency in the face of climate change. NMED is requesting a special appropriation of \$15.8 million in order to jump-start investigation and cleanup at neglected contamination sites, and to develop an ongoing site cleanup program with sustainable funding. The goal of the program will be to assess and reduce the risks that neglected contamination sites pose to groundwater supplies, human health, and the environment. NMED will use the appropriation to focus on four objectives:

1. Sorting and refining the Inventory of potential neglected contamination sites;
2. Assessing the risks posed by neglected contamination at sites across the state;
3. Conducting remediation and/or monitoring at priority sites to reduce the risks; and
4. Developing a proposal for an effective, ongoing neglected site contamination program with appropriate statutory underpinning and sustainable funding.

This Implementation Plan explains the urgent need to address neglected site contamination and describes the process and principles NMED will use to accomplish these objectives.

I. Introduction

The New Mexico 50-Year Water Plan recently developed by the Office of the State Engineer recognizes that protecting and restoring groundwater quality are essential to the state’s resilience in responding to climate change. The state has important laws and programs in place to protect groundwater, but one area critically needing attention is the problem of sites that contain neglected contamination or what are sometimes referred to as “Orphan Sites”. These are locations with known or suspected contamination that is not being cleaned up because a viable responsible party (RP) cannot be identified, and the site cannot receive cleanup funding assistance through an existing state or federal program.

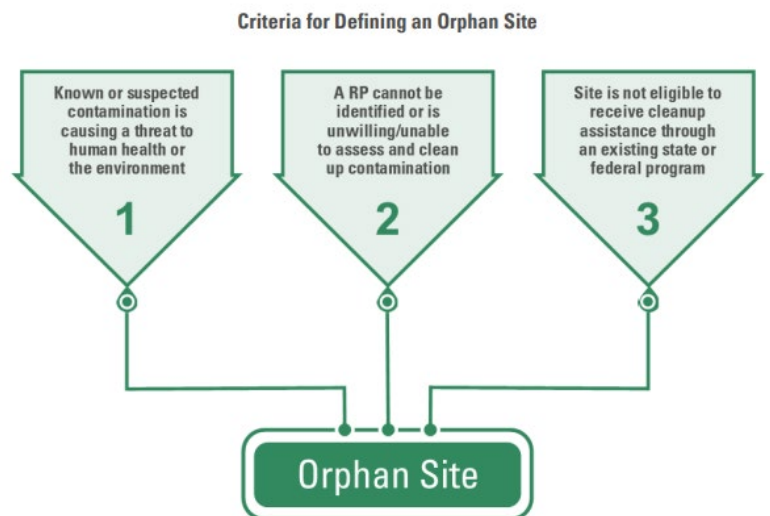
Unlike most other states, New Mexico does not have a state fund to remediate sites with neglected contamination (except petroleum tank sites), so the contamination at these sites pose an ongoing risk to groundwater supplies, human health, and economic well-being. The New Mexico Environment Department (NMED) believes now is the time to tackle this challenge. This Implementation Plan characterizes the neglected site contamination problem in New Mexico and explains NMED’s proposal to use an initial legislative appropriation to jump-start investigation and cleanup at these sites, and to develop an ongoing neglected site contamination program with sustainable funding.

A. Neglected Contamination Sites in New Mexico

NMED’s 2021 report, [“Orphan Sites in New Mexico – The Need to Mitigate Risks to Public Health and the Environment,”](#)

characterized what is currently known about the nature, extent, and risks of neglected contaminated sites in the state. It presented an inventory of 302 sites located across the state, in urban and rural areas, that may meet the criteria for a neglected contamination site. The report highlighted three examples – in Bloomfield, Tucumcari, and Santa Fe – where the community is striving to assess and clean up neglected site contamination.

Neglected contamination at sites in New Mexico is associated with former auto service/repair, dry cleaning, wood treating, oil processing, power generation, manufacturing, agricultural practices, electroplating, research facilities, natural gas plants, chemical handling, and other operations. Numerous spills, historic (pre-regulatory) landfills, and illegal dumps are also on NMED’s inventory of potential neglected contamination sites.



The most common contaminants at these sites are petroleum hydrocarbons, chlorinated solvents, heavy metals, and polychlorinated biphenyls (PCBs), though emerging contaminants such as poly and perfluoroalkyl substances (PFAS) are of growing concern.

Neglected site contamination poses numerous risks. It threatens rivers, wetlands, and other surface waters. It leaches into the soil and can pollute groundwater. Some contaminants in the subsurface volatilize and move into overlying structures to contaminate indoor air. In addition to the contamination present, these sites are often unsecured vacant lots with safety risks such as dilapidated structures. They contribute to blight and declining property values within the community.

**Common
Contaminants
at Neglected
Contamination
Sites**
Benzene
Toluene
Naphthalene
Perchloroethylene
Trichloroethylene
Arsenic
Chromium
Lead
Pesticides
Plasticizers
PCBs

B. Lack of Authority, Staffing, and Funding

The inability to clean up neglected site contamination is a frustrating reality in New Mexico.

NMED currently has several successful programs with cleanup authority to address some neglected site contamination, e.g., Superfund, the Corrective Action Fund (CAF), the Voluntary Remediation Program, and Brownfields. However, none of these programs provides the full authority needed to address these sites.

A lack of funding is a significant obstacle for addressing risks from neglected site contamination. Current NMED staff are fully allocated to other duties and do not have time to spend on these sites. New Mexico does not have a state fund dedicated to the cleanup of neglected site contamination. A review of neglected site contamination programs in other states revealed expenditures for site investigation and cleanup, not including staff oversight, ranging from approximately \$1 million to \$10 million annually. Site-specific cleanup costs are highly variable depending on the nature and extent of the contamination and the hydrogeologic setting of the site. Cleanup costs exceeding \$200,000 per site are not unusual. Groundwater remediation typically costs well over \$1 million per site.

C. What Should Be Done?

The Orphan Site Report recommended several next steps for NMED: evaluating which sites pose the greatest threats, conducting sampling, initiating cleanups, increasing public outreach, and increasing efforts to identify and hold RPs accountable. Finally, the report stressed the need to evaluate options for establishing a sustainable fund to address neglected site contamination.

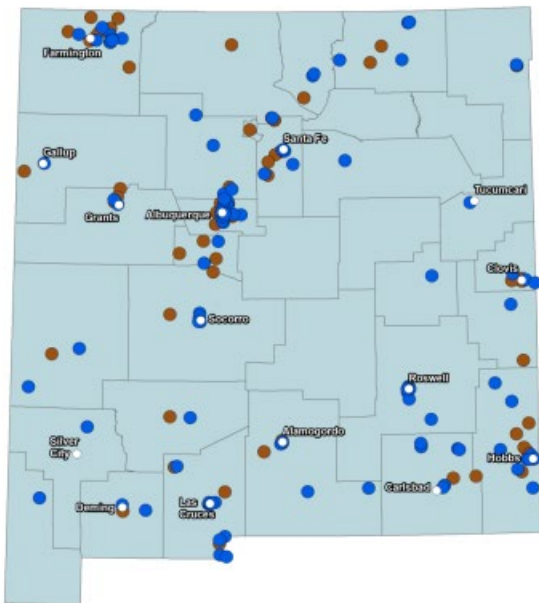
The NMED Ground Water Quality Bureau (GWQB) has reviewed approaches being used in other states, identifying methods that warrant consideration as models for a New Mexico neglected site contamination program. Many states have a statute that specifically authorizes state action at these neglected contamination sites. Such statutes often establish a liability structure and procedures for recovering costs if an RP is identified later. Some states have an official list of

sites to address and a system for prioritizing the sites on the list. Some have developed special programs to investigate and remediate landfills and dry-cleaner sites. Various funding mechanisms are used in other states, including hazardous waste fees, solid waste disposal fees, water fees, petroleum funds, dry-cleaner taxes, bonds, natural resources (oil, gas, coal) fees, investment fees, and appropriations.

Having identified the necessary building blocks, NMED proposes to work with stakeholders to develop a long-term, sustainable neglected site contamination program for New Mexico. In the short term, neglected contamination site assessments and cleanups should begin.

Map of Identified Orphan Sites in New Mexico and Number of Sites by County
 (sites with contamination information shown as blue dots; sites with limited information shown as brown dots)

Note: approximately 90 sites not shown on map due to lack of precise location information



County	Number of Sites	County	Number of Sites
Bernalillo	51	McKinley	4
Catron	2	Mora	0
Chaves	18	Otero	8
Cibola	7	Quay	3
Colfax	8	Rio Arriba	14
Curry	16	Roosevelt	3
De Baca	2	Sandoval	10
Doña Ana	28	San Juan	25
Eddy	18	San Miguel	2
Grant	3	Santa Fe	12
Guadalupe	0	Sierra	2
Harding	1	Socorro	13
Hidalgo	2	Taos	4
Lea	27	Torrance	2
Lincoln	1	Union	4
Los Alamos	1	Valencia	7
Luna	4	Total Sites	302

II. Initiating an Neglected Site Contamination Program for New Mexico

A. Goal and Objectives.

NMED proposes to initiate a neglected site contamination program for New Mexico by requesting a legislative appropriation of \$15.8 million. The goal of the program will be to assess and reduce the risks that neglected contamination sites pose to groundwater supplies, human health, and the environment.

NMED will use the appropriation to focus on four objectives:

1. Sorting and refining the inventory of potential neglected contamination sites;
2. Assessing the risks posed by neglected site contamination at across the state;
3. Conducting remediation and/or monitoring at priority sites to reduce the risks; and

4. Developing a proposal for an effective, ongoing neglected site contamination program with appropriate statutory underpinning and sustainable funding.

B. Principles: Stewardship, Sustainability, and Equity.

NMED will utilize the following guiding principles in the development of the neglected site contamination program:

- *Stewardship.* Cleaning up groundwater contamination at neglected contamination sites will restore community water supplies and support economic development for future generations.
- *Sustainability.* A neglected site contamination program with a reliable funding source will enhance community resilience and provide more access to clean water, reduced exposure to contaminants, and allow for the redevelopment of cleaned up properties.
- *Equity.* In developing and implementing this effort, NMED will be guided by its non-discrimination and environmental justice policies to ensure fair treatment and meaningful involvement opportunities for all interested persons. NMED will consider the challenges facing disadvantaged communities, including those historically overburdened by pollution sources and those particularly impacted by climate change. NMED will coordinate with Pueblos, Tribes, and Nations whose communities may be affected by neglected contamination sites on non-tribal land.



Public Outreach and Involvement

Public involvement is critical at all stages for the success of this initiative. NMED will:

- Solicit input from local governments regarding community concerns and the status of the sites on the inventory.
- Develop a public involvement plan for every site undergoing remediation planning.
- Develop a GIS interface on the GWQB website to include the current list of potential neglected contamination sites, their locations on a map, and contaminant information.
- Engage all interested stakeholders in developing the proposal and funding for a long-

C. Program Structure and Staffing.

Adequate staffing is critical for the success of this effort. These sites have languished in New Mexico in part because existing staff simply do not have time to focus on them and still attend to their primary responsibilities. NMED envisions creating a unit within the GWQB, which houses other cleanup programs – Superfund, Brownfields, Voluntary Remediation, and abatement – and has particular expertise with groundwater. The new unit would consist initially of a manager and two technical positions. Support would also be needed from a financial/contracts analyst under Administrative Services Division supervision and from the Office of General Counsel.

D. Action Steps for Neglected Site Contamination Cleanup

NMED anticipates the new unit will implement the following action steps to achieve the program objectives. Much of the work will be done in-house. However, approximately 83% of the budget is allocated for contractor assistance to conduct site investigations and remedial actions. Staff will have the

responsibility of managing the contractors and overseeing the contracted work.

1. *Review and refine the Inventory of Potential Neglected Contamination Sites*

The 2021 Orphan Site Report presented an inventory of 302 potential neglected contamination sites. Some of the sites on the inventory may not qualify as a neglected contamination site, may have been addressed by another program, or may not pose an environmental risk at this time. It is also anticipated that additional sites will be added to the inventory. The GWQB will consult with other bureaus and agencies as well as local stakeholders for updated information and for other potential sites.

2. *Assess and prioritize sites for further action.*

Based on a preliminary review, the GWQB determined that of the 302 sites on the inventory, information about the type of contamination present exists for approximately 130 sites. NMED expects to focus first on this subset of sites. Substantial sampling has occurred at some sites while very little information is available for other sites.

In order to assess risk across the 130 sites, the GWQB will consider multiple approaches. The review of existing site information, site visits, and preliminary sampling could all be important steps on a site-by-site basis. Systematic analysis may also prove useful. For example, mapping the proximity of neglected contamination sites to public water supply wells could indicate public water systems at risk. Follow-up sampling of those wells may identify impacts that would not be detected under normal drinking water sampling protocols.

Using the information from these various sources, the GWQB will prioritize sites for further action based on the following criteria: threat to public water systems and other water supplies, threat to indoor air from vapor intrusion, onsite hazards, and impact to sensitive environments.

Other factors that are not directly related to environmental risk may also affect a site's priority. For example, NMED intends to prioritize sites in all quadrants of the state. The level of community interest, environmental justice considerations, and cost efficiencies will also be considered. Table 1 summarizes these criteria and factors.

Is it Really a Neglected Contamination Site?

The GWQB will review whether a viable RP exists to take responsibility for cleaning up a site. Sites with RPs will be addressed through the abatement program under the Water Quality Control Commission regulations, or other programs as appropriate.

Cost Recovery

The language of the appropriation allows NMED to recover investigation and remediation costs if a viable RP is identified.

Table 1. Initial Prioritization Criteria for Neglected Contamination Sites

Priority A
<ul style="list-style-type: none"> • Confirmed or significant threat to a Public Water System well or surface water Intake.

<ul style="list-style-type: none"> • Confirmed or significant vapor intrusion risk to residential area or sensitive facilities, e.g., day care, schools. • Potential presence or leaking containers or widespread surface soil contamination where site access is uncontrolled.
Priority B
<ul style="list-style-type: none"> • Significant threat to groundwater that does not currently supply a Public Water System • Threat to aquatic ecosystems or other sensitive habitats, e.g., wetland, wildlife refuge, threatened or endangered species habitat • Confirmed or potential vapor intrusion risk to commercial or industrial area
Priority C
<ul style="list-style-type: none"> • Moderate or low risk to groundwater • Soil and/or surface contamination
Other Factors That Could Affect Priority
<ul style="list-style-type: none"> • High community interest/benefit in redeveloping the site • Proximity to a disadvantaged community • Geographic distribution across state • Site factors, e.g., difficulty in gaining access • Cost efficiency, e.g., high benefit for low remediation cost, proximity to another site where work is also being done

3. *Refer sites for RP action or to other appropriate programs.*

At every stage of the process, sites for which a viable RP can be identified, or which qualify for an existing cleanup program will be referred as appropriate. Research into viable RPs can involve technical, legal and administrative staff time, and subsequent negotiations can be complex and lengthy.

4. *Complete closure documentation for sites where no further action is needed.*

The GWQB anticipates that some sites on the inventory do not pose significant risks to human health or the environment. This may be evident upon review of existing information, after a site investigation, or after remedial action. These sites may be considered “closed” and removed from the inventory, but appropriate documentation will be maintained and made available as needed into the future.

5. *Conduct environmental investigations at prioritized sites.*

Sites prioritized as posing a potential threat to water supplies or human health may require a more detailed site investigation to determine the nature and extent of any contamination present. This step involves sampling environmental media as appropriate for the site: soil, groundwater, soil vapor, etc.

How detailed this investigation needs to be varies widely. For a relatively simple situation, collecting and analyzing a few soil samples may suffice. On the other end of the spectrum, investigation of a site where groundwater contamination is suspected may involve the installation of monitoring wells and other sampling equipment, one or more sampling events, geotechnical work, and groundwater modeling. The cost of such an investigation can range from \$60,000 to \$120,000 (or more) per site.

The results of some site investigations may indicate that contamination, if detected, is below thresholds of concern. In those cases, the site can be closed, and the affected community – after what may have been a long period of uncertainty – will finally know that the site does not threaten their health or well-being.

6. Evaluate remediation alternatives and begin remediation at prioritized sites.

Where investigation has confirmed the need for cleanup at a prioritized site, the GWQB will initiate a process to evaluate remediation alternatives. Some sites on the inventory may currently be ready for this step. The process will include the development of a public involvement plan to assure that all affected persons and communities can participate in the selection of appropriate remedial actions.

Like site investigations, remedial actions vary in complexity and cost. Sometimes interim measures will be needed while remediation is underway, for example, providing an alternative water supply or installing vapor mitigation systems. Where contamination does not pose an imminent threat, the best alternative may be to implement a monitoring program.

What About Uranium Mine Sites?

The 2022 Legislature approved HB 164 directing NMED to coordinate efforts across the state to reclaim former uranium mine and mill sites. The bill authorized positions at NMED and the Energy, Minerals, and Natural Resources Department and created a fund where money recovered by litigation and settlements and from other sources can be deposited and used for reclamation.

Uranium site cleanup is a separate priority that will not be wrapped into a neglected site contamination program. NMED will nevertheless facilitate coordination between the programs and the sharing of expertise.

E. Action Steps to Develop Long-Term Program Proposal with Sustainable Funding

This initial appropriation can only jump-start a neglected site contamination program – it cannot sustain one. Therefore, while site assessments and remediation are taking place, NMED will also develop a legislative proposal for an ongoing program with a sustainable funding mechanism, to be considered at the 60-day legislative session in 2029.

The program manager will spearhead this effort with support from the other program staff and NMED's upper management. It will entail the following steps.

1. Engage stakeholders.

NMED will reach out to a broad range of interested stakeholders, including county and municipal governments, environmental organizations, water suppliers and users, chambers of commerce, industry, tribes, and other agencies. The public involvement will be designed to gather information and ideas in the early stage, then to develop a draft proposal, and finally to provide for public comment on the proposed program.

2. *Evaluate options for creating and sustaining a neglected site contamination fund.*

The success of an ongoing neglected site contamination program hinges on sufficient funding and the creation of a sustainable funding mechanism. A multi-million-dollar annual budget and several staff positions will be required to adequately tackle the problem. To determine the best options for creating a neglected site contamination fund and long-term funding mechanism(s), NMED will work with the New Mexico Economic Development Department to develop a financial analysis for the program. Once completed, the financial analysis will be made available for stakeholder input.

3. *Consider a range of possible program components such as:*

- System for prioritizing site investigation and cleanup
- Liability structure that facilitates cost recovery
- Definition of neglected contamination site status
- Public involvement process
- Listing/De-listing process
- Special considerations for pre-regulatory landfills or dry cleaners
- Institutional controls after site closure

4. *Incorporate lessons learned from assessments, remediation, and public outreach being conducted with this appropriation.*

Ongoing assessments and cleanup will provide insight into the extent of the neglected site contamination problem, the predominant types and sources of contamination at these sites, the best methods for engaging with communities, and other questions. This experience will inform the proposal development process.

F. Budget

NMED is requesting \$15.8 million. Approximately 15% of the funding be used for five positions: three technical staff, one Team Lead and one Program Manager. The three technical staff positions plus the technical Team Lead will focus on the site assessments and remediation. They will perform some of the site work themselves, especially initial assessments, site visits, and sampling. They will conduct public outreach and maintain the web portal with support from administrative staff. They will also manage contracts for the completion of detailed site investigations and remediation, in the same manner that the Superfund program does, with support from financial and contract specialists. The Program Manager will be responsible for developing the long-term funding and program proposal, as well as for overall progress and reporting.

Contracted services will account for approximately 83% of the budget. GWQB has professional services contracts already in place, so site work can begin as soon as the funding becomes available.

III. Timeline for Implementation

The timeline sketch below shows the task distribution over the calendar and fiscal years following approval of the appropriation. Public outreach begins immediately to refine the inventory. Work to assess and prioritize sites ramps up quickly from 2025 into 2026. Detailed investigations and remediation projects will also begin early for sites that are ready and will intensify by 2027 and beyond.

The proposal development effort will focus first on research into a sustainable funding approach in 2026, then shift to developing the details of the program in 2027. The target for presenting a legislative proposal is the 60-day legislative session in 2030.

NMED will report its progress annually to legislative committees.

<i>Calendar years</i>	2025	2026				2027				2028				2029				2030			
<i>Fiscal Years</i>	FY26				FY27				FY28				FY29				FY30				
Create Positions and Hire Staff	█	█	█	█																	
Site Assessments & Remediation																					
Public Outreach and Review Inventory			█	█	█	█	█	█	█	█	█	█	█								
Assess & Prioritize Sites			█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█		
Detailed Site Investigations			█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█		
Remediation Projects			█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█		
Proposal Development for Ongoing Program and Funding																					
Evaluation of Fund Options		█	█	█	█	█	█	█	█	█	█	█	█	█	█						
Stakeholder Engagement			█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█		
Proposal Development						█	█	█	█	█	█	█	█	█	█	█	█	█	█		
Legislative Reporting																	█				