New Rules on Chemically Contaminated Sites

Mains: *GS III – Environment pollution and degradation.*

Why in News?

Recently, The Environment Ministry has notified The Environment Protection (Management of Contaminated Sites) Rules, 2025, under the Environment Protection Act that lays out a process for addressing sites with chemical contamination.

What are contaminated sites?

- **Definition** – According to the Central Pollution Control Board, these sites are *where hazardous and other wastes were dumped historically.*
- **Effects** – It has most likely resulted in *contamination of soil, groundwater and surface water that pose a risk to human health* and the environment.
- **Origin and causes** – Some of the sites were developed when there was no regulation on management of hazardous wastes.
- In some instances, polluters responsible for contamination have *either closed down their operations or the cost of remediation is beyond their capacity.*
- **Types** – These may include landfills, dumps, waste storage and treatment sites, spill-sites, and chemical waste handling and storage sites.
- **Number of sites** – There are 103 such sites identified across the country.
- Only in seven sites has remedial operation commenced, which involves cleaning the contaminated soil, groundwater, surface water and sediments by adopting appropriate technologies.

Why were these rules necessary?

- **Background** – The Environment Ministry had, in 2010, initiated a *Capacity Building Program for Industrial Pollution Management Project* to formulate the National Program for Remediation of Polluted Sites.
- This consisted of three broad tasks
    - **Creating an inventory** – Forming a registry of probable contaminated sites.
    - **Evolving a guidance document** – Developing a guidance document for assessment and remediation of contaminated sites.
    - **Development of framework** – To build a legal, institutional and financial framework for the remediation of contaminated sites.
- While the first two steps have been in place, the last step, regarding a legal codification, remained unfulfilled.
- The rules that were made public on July 25 were part of this legal codification process.

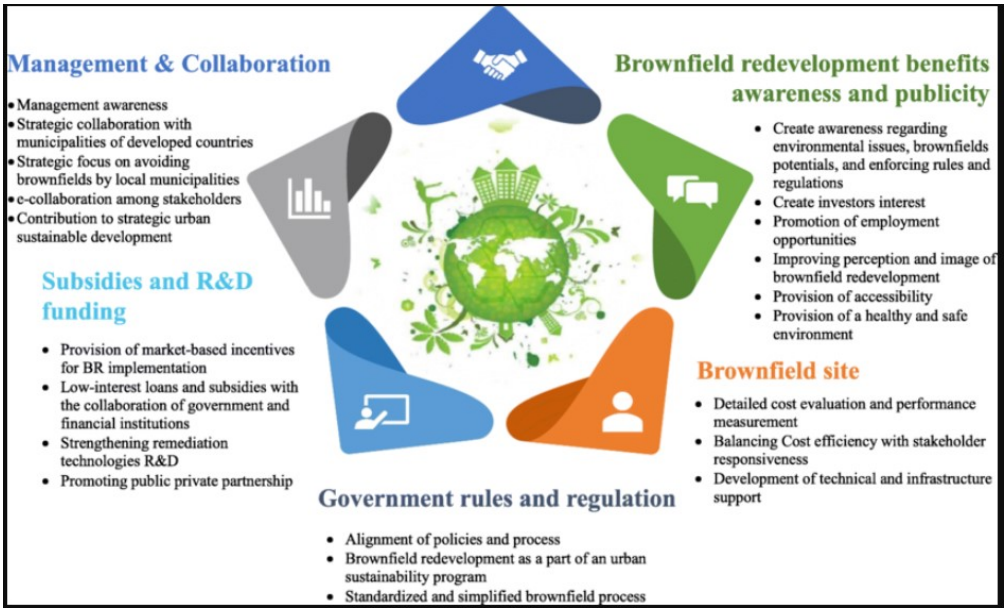
What are the process under the new rules?

- **Reports** – Under these rules, the district administration would prepare half-yearly reports on suspected contaminated sites.
- **Preliminary assessment** – A State board, or a reference organisation would examine these sites and provide a preliminary assessment within 90 days of being thus informed.
- **Survey** – Following these, it would have another three months to make a detailed survey and finalise if these sites were indeed contaminated.
- This would involve establishing the levels of suspected hazardous chemicals.
    - There are currently *189 marked chemicals* under the provisions of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
- **Restriction** – If these sites exceed safe levels, the location of these sites would be publicised and restrictions placed on accessing it.
- **Remediation plan** – Then, the reference organisation which would basically be a body of experts, would be tasked with specifying a remediation plan.
- **Identification of violators** – The State board would also have 90 days to identify the person(s) responsible for the contamination.
- **Liability for cleaning** – Those deemed responsible would have to pay for the cost of remediation of the site, else the Centre and the State would arrange for the costs of clean-up.
- **Legal action** – Any criminal liability, if it is proved that such contamination caused loss of life or damage would be under the provisions of the Bharatiya Nyaya Sanhita (2023).

What are the exemptions?

- **Exempted sites** - The new rules does not deal with contamination resulting from
    - Radioactive waste
    - Mining operations
    - Pollution of the sea by oil
    - Solid waste from dump sites
- **Lack of timeline** – Another major omission from the rules is the lack of a defined timeline whereby once a contaminated site is identified, a deadline is set by which it must be returned to safe levels.

What could be done to address the chemically contaminated sites?



Brownfield sites *are previously developed land that are abandoned or underutilized, often with known or potential contamination from past industrial or commercial use.*

Reference

[The Hindu| New Rules for Contaminated Sites]

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