

# ASSESSMENT & CLEANUP

NJ Brownfields  
Assistance Center @ NJIT



**WHAT ARE THE COMPONENTS  
OF A SITE INVESTIGATION?**



**NEW JERSEY BROWNFIELDS  
REGULATORY PROCESS**



**WHAT ARE THE COMPONENTS  
OF A REMEDIAL INVESTIGATION?**



**ENVIRONMENTAL ACRONYMS  
QUICK REFERENCE GUIDE**



**WHAT ARE THE COMPONENTS  
OF REMEDIAL ACTION?**



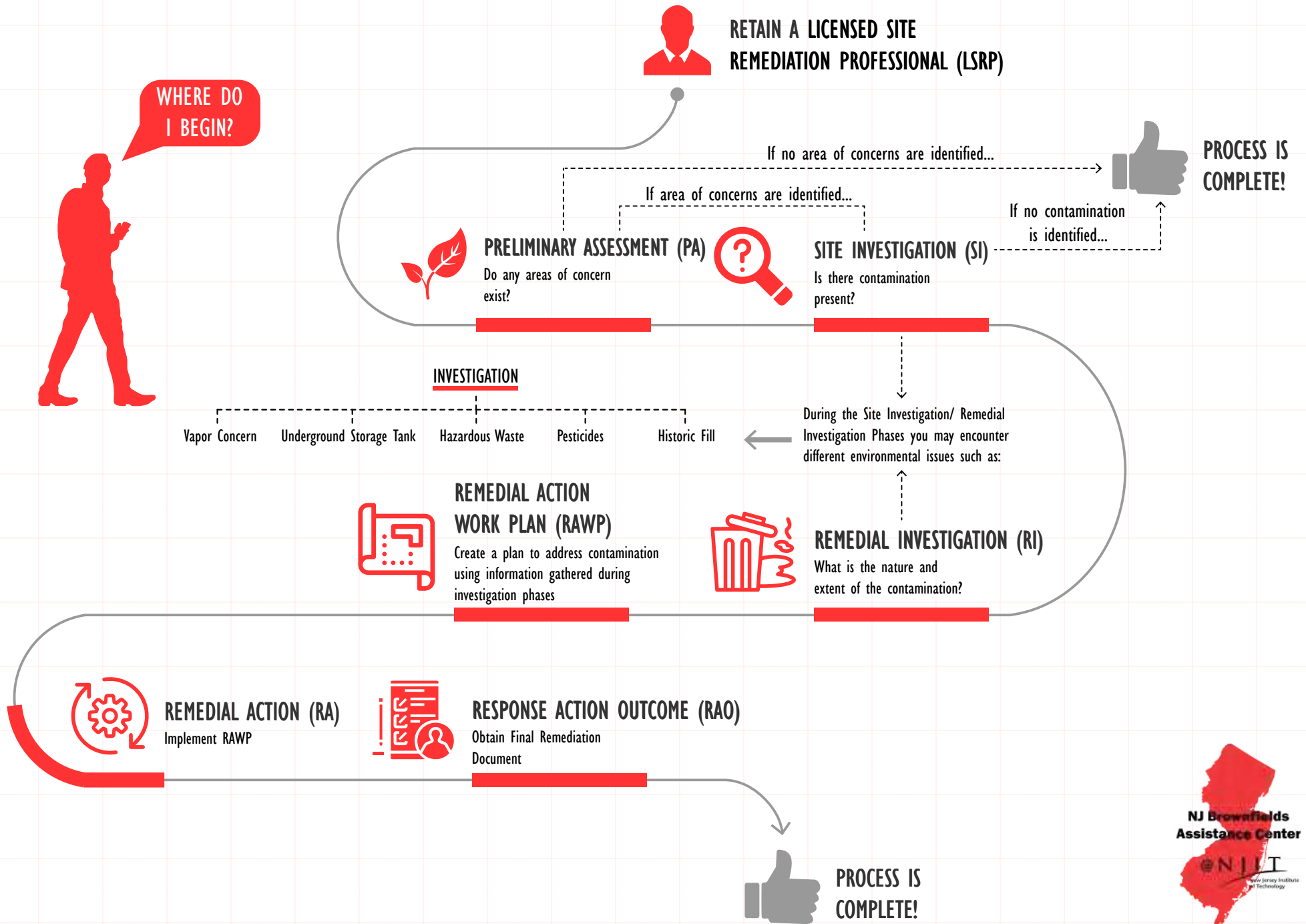
**WHAT ARE THE COMPONENTS  
OF A PRELIMINARY ASSESSMENT?**



**FINAL DELIVERABLES**



# NEW JERSEY BROWNFIELDS REGULATORY PROCESS



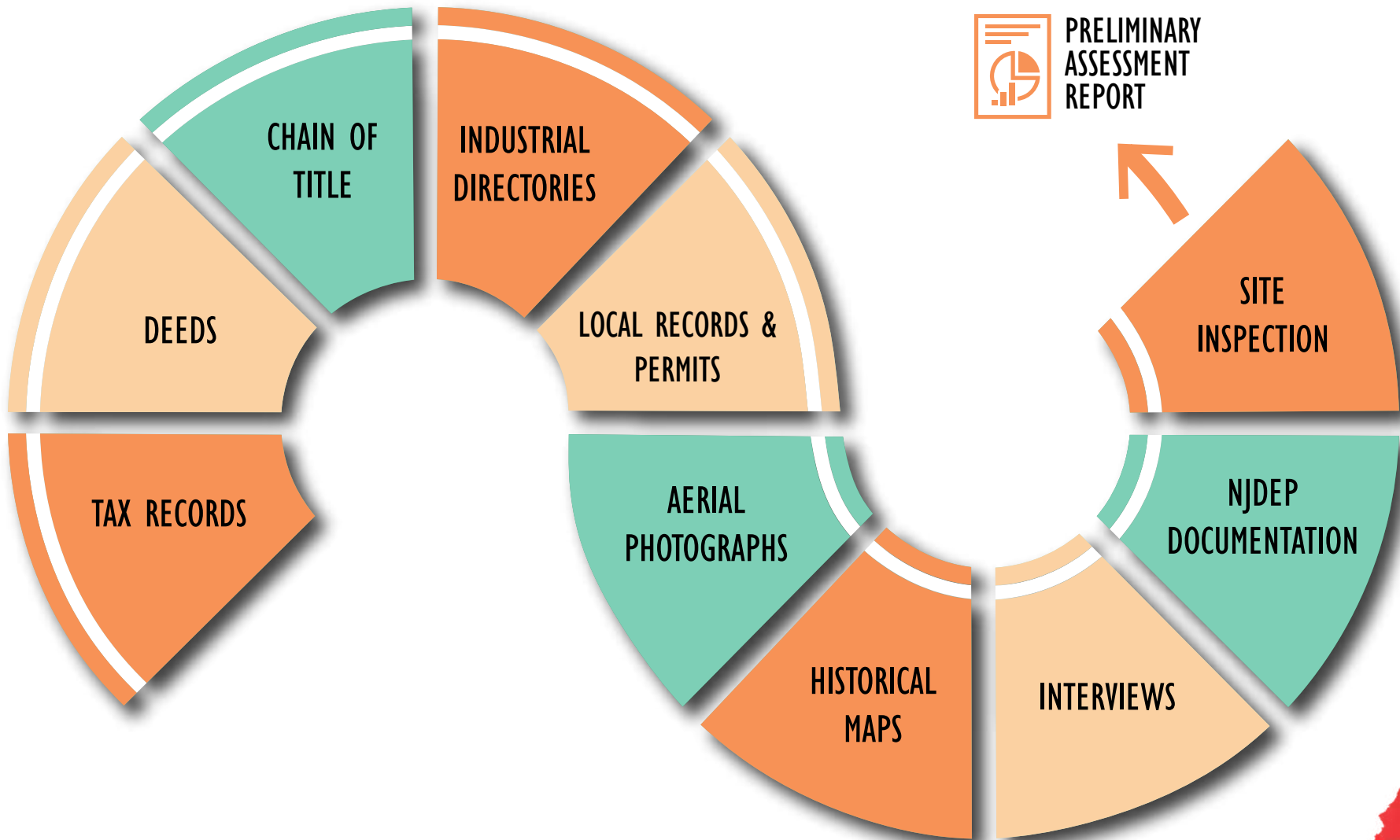
# Environmental Acronyms

## Quick Reference Guide

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<b>ACM</b>	Asbestos Containing Materials	<b>NJDEP</b>	New Jersey Department of Environmental Protection
<b>AOC</b>	Area of Concern	<b>OSHA</b>	Occupational Safety and Health Administration
<b>AST</b>	Above Ground Storage Tank	<b>PA</b>	Preliminary Assessment
<b>ASTM</b>	American Society for Testing Materials	<b>PCBs</b>	Polychlorinated Biphenyls
<b>BGS</b>	Below Ground Surface	<b>PPB</b>	Parts Per Billion
<b>BTEX</b>	Benzene, Toluene, Ethylbenzene, Xylenes	<b>PPM</b>	Parts Per Million
<b>CEA</b>	Classified Exemption Area	<b>RA</b>	Remedial Action
<b>DN</b>	Deed Notice	<b>RAO</b>	Response Action Outcome
<b>EP</b>	Environmental Professional	<b>RAWP</b>	Remedial Action Work Plan
<b>EPA</b>	United States Environmental Protection Agency	<b>RI</b>	Remedial Investigation
<b>ESA</b>	Environmental Site Assessment	<b>REC</b>	Recognized Environmental Condition
<b>GPR</b>	Ground Penetrating Radar	<b>TWP</b>	Temporary Well Point
<b>LBP</b>	Lead Based Paint	<b>TPH</b>	Total Petroleum Hydrocarbons
<b>LSRP</b>	Licensed Site Remediation Professional	<b>SI</b>	Site Investigation
<b>LUST</b>	Leaking Underground Storage Tank	<b>SSD</b>	Sub-Slab Depressurization
<b>MW</b>	Monitoring Well	<b>UST</b>	Underground Storage Tank
<b>NFA</b>	No Further Action	<b>VOCs</b>	Volatile Organic Compounds
<b>NAPL</b>	Non-Aqueous Phase Liquid	<b>VI</b>	Vapor Intrusion

# What are the components of a Preliminary Assessment?



**NEXT:** What are the components of a Site Investigation?

# What are the components of a Site Investigation?

## 1 CONDUCT FIELD SAMPLING

Sample locations are based on the areas of concern from the Preliminary Assessment. Field work may include installation of soil borings, temporary well points and/or vapor points.

SOIL BORINGS

TEST PIT

## 2 SUBMIT SAMPLES TO LABORATORY

Samples are collected to determine if any contamination exists at the site. Various analyses will be performed on the samples based on the present and/or past usage of the property. Samples may include soil, sediment, groundwater, surface water and/or air.

GROUND PENETRATING RADAR

Utilities must be located prior to drilling. Screening methods may include use of photo-ionization detector (PID) as well as visual and olfactory observations.

## 3 COMPARE RESULTS TO NJDEP STANDARDS

In order to determine if any further action is required, the laboratory data will be compared to the applicable New Jersey Department of Environmental Protection standards. If the concentrations are below the standards, no further action is required. If the concentrations are above the standards, further action is required.

## SITE INVESTIGATION REPORT

The report will document the investigation activities completed, provide the analytical data from the laboratory and make conclusions regarding contamination at the site based on the data in comparison to the applicable New Jersey Department of Environmental Protection standards.

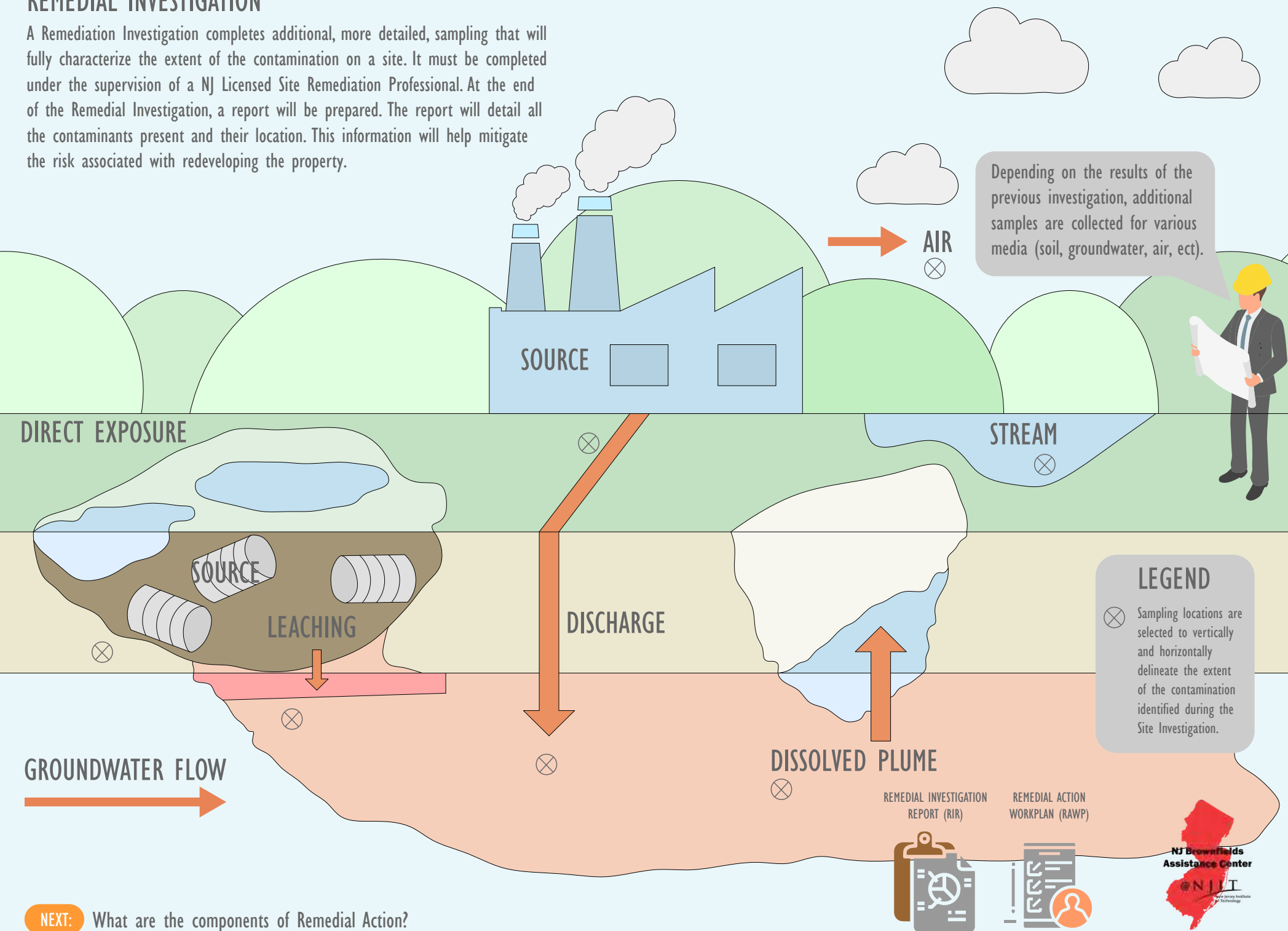


**NEXT:** What are the components of a Remedial Investigation?



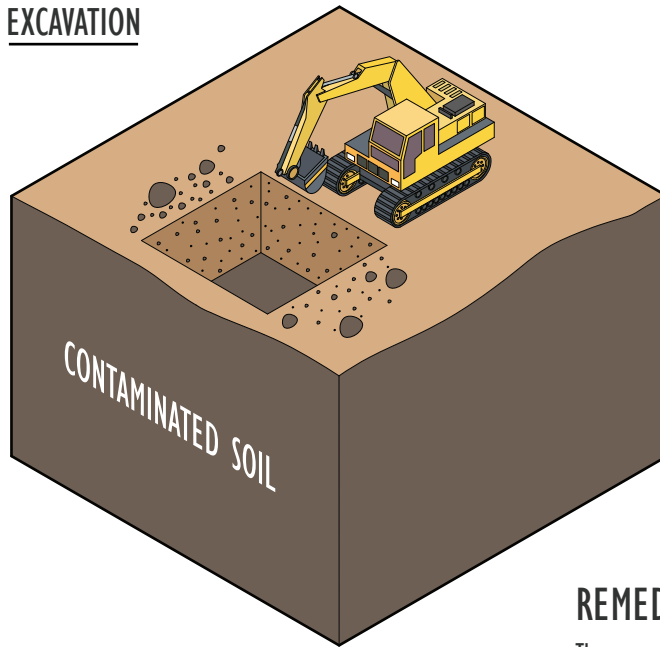
# REMEDIAL INVESTIGATION

A Remediation Investigation completes additional, more detailed, sampling that will fully characterize the extent of the contamination on a site. It must be completed under the supervision of a NJ Licensed Site Remediation Professional. At the end of the Remedial Investigation, a report will be prepared. The report will detail all the contaminants present and their location. This information will help mitigate the risk associated with redeveloping the property.

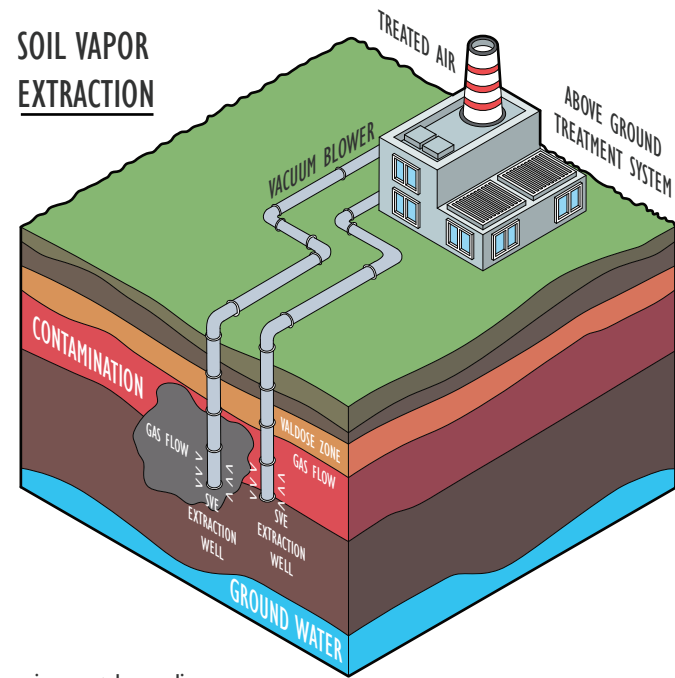


**NEXT:** What are the components of Remedial Action?

## EXCAVATION

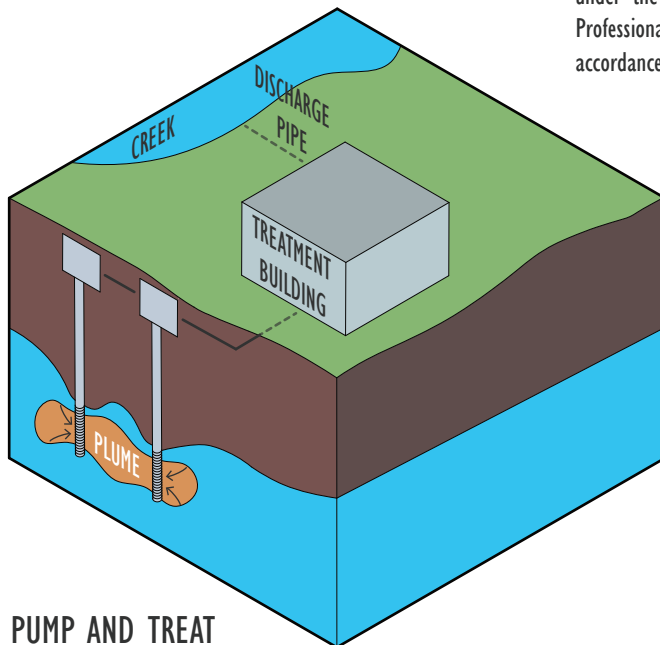


## SOIL VAPOR EXTRACTION

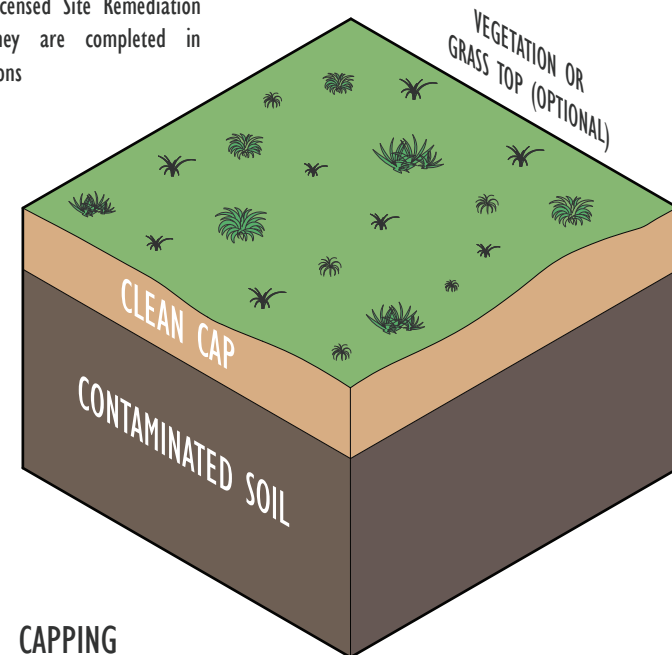


## REMEDIAL ACTION:

These are some common types of environmental remediation. The remedial action selected for the site will be based on the information obtained during the previous assessment and investigation steps. Remedial Actions must be conducted under the supervision of a NJ Licensed Site Remediation Professional to ensure that they are completed in accordance with the state regulations

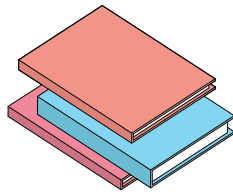


## PUMP AND TREAT



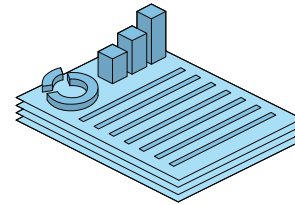
## CAPPING

## FINAL DELIVERABLES



### REMEDIATION ACTION REPORT

The Remedial Action Report will document the remediation activities that took place at the site. Additionally, the report will summarize the confirmation sampling and analyses used to demonstrate the effectiveness of the selected remedial action(s).



### RESPONSE ACTION OUTCOME

The retained Licensed Site Remediation Professional will issue a Response Action Outcome (RAO), with the appropriate notices, to memorialize the completion of remediation.