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EPA ECHO Violations in PE Target Screening: Escalation Matrix

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Executive Summary

An EPA Enforcement and Compliance History Online (ECHO) record for a matched plant is a dated snapshot of what regulators reported into national databases. It is not a verdict on the plant, its owner, or an acquisition. EPA says that "anywhere from a week up to three months" can separate source entry from ECHO display (echo.epa.gov), and that EPA "cannot positively state that facilities without violations shown in ECHO are necessarily fully compliant" (echo.epa.gov). This report sets out a **research escalation protocol** for private-equity origination analysts who already hold a reconciled facility match. It is research triage, not environmental due diligence, a risk score, a legal conclusion, or a view on acquisition suitability.

The difficulty is interpretation. ECHO shows different windows in different views: five years of inspection and enforcement data in facility searches (echo.epa.gov), ten years in the Detailed Facility Report (echo.epa.gov), three years of compliance quarters (echo.epa.gov), and all years of formal EPA enforcement data in the Enforcement Case Search (echo.epa.gov). Violation labels carry limits too: ECHO states that its violation and priority terms "do not necessarily represent a final adjudication" (echo.epa.gov), and the priority term differs by program, since "SNC is used for RCRA and CWA, and HPV is used for CAA" (echo.epa.gov). Actions that have not concluded are not displayed (echo.epa.gov).

Coverage is the second limit. ECHO generally covers four major statutes (echo.epa.gov), states run most programs and hold their own records (www.congress.gov), and a smaller facility "may appear uninspected" in ECHO (echo.epa.gov). A blank search, a historical resolved row, and a recent formal action therefore call for different next steps: check the state system, read the dated reports, or escalate to a named reviewer with the official record. The report supplies a six-rung evidence ladder, an escalation matrix, and a reconciliation worksheet whose tally carries the matched-facility denominator and is never labelled a compliance rate.

At the program level, EPA reported concluding 2,127 civil enforcement cases in fiscal year 2025 (www.epa.gov). As of October 2026, the defensible posture is to record what a row supports, name what it cannot, date the snapshot, and route the rest to a qualified professional.

Introduction and Background

Private-equity origination teams usually screen industrial targets long before an environmental consultant is engaged. A common early step is to match a target company to its plants and look each plant up in ECHO. The matching step, which links a corporate entity to a specific facility and an EPA Facility Registry Service (FRS) Registry ID, is a separate problem covered in a companion guide on entity-versus-facility reconciliation. This report starts after that step: given a matched plant and an ECHO result, what does a dated permit, inspection, violation, or enforcement row actually support, and what should the analyst do next?

ECHO is built for this kind of lookup. A CDC Agency for Toxic Substances and Disease Registry (ATSDR) guidance page describes it as a tool that "allows users to search for facility-related enforcement and compliance data" (www.atsdr.cdc.gov). ECHO's own description is more guarded. It presents data as reported to the original source databases, disclaims any warranty on accuracy, completeness, or currency, and states that national databases are generally more complete for larger facilities. Without a written protocol, three errors recur: a blank result is read as a clean result, an old resolved row is read as a live problem, and a recent action is read as a conclusion instead of a lead.

This report applies the protocol through three fictional examples and supplies a matrix and a worksheet. It is published by Docket, a platform that produces sourced target research for private-equity origination teams, as general research guidance. Jurisdiction-specific interpretation and liability questions cannot be settled by a desk screen, so several steps end with a referral to the relevant agency or to a qualified environmental professional or counsel.

Terms used throughout:

- **ECHO**: EPA's public search for compliance and enforcement data on EPA-regulated facilities.
- **FRS Registry ID**: the EPA identifier that links a facility's records across program systems.
- **Program ID**: the identifier a specific program assigns, for example a Clean Air Act (CAA), Clean Water Act (CWA), or Resource Conservation and Recovery Act (RCRA) permit or handler ID.
- **SNC / HPV**: Significant Noncompliance (CWA, RCRA) and High Priority Violation (CAA), the programs' most serious designations.
- **Analyst inference**: a conclusion the analyst draws that the source does not itself state.

Reading an ECHO Record: Source Systems, Fields and Dates

What ECHO contains and where the data come from

ECHO covers air emissions from stationary sources, surface water dischargers, hazardous waste handlers, and drinking water systems, and it combines EPA records with state, local, and tribal records reported into national databases. Most of the content is supplied by states. A Federal Register notice on air reporting says delegated agencies report compliance and enforcement information to EPA through the Integrated Compliance Information System (ICIS) (public-inspection.federalregister.gov), and that the majority maintain their own data system and upload from it, while only a small number use ICIS-Air exclusively (public-inspection.federalregister.gov). EPA's Office of Inspector General reports that state and local agencies conducted about 98.5 percent of air compliance monitoring activities in the period it examined (www.epa.gov).

Air history also has a break: ICIS-Air replaced the Air Facility System in October 2014 (govinfo.gov), so older air rows were built differently. Each underlying system has its own extract date, so the analyst should record the extract date of the system behind a row, not only the date the search was run.

The statutes in scope are narrower than many analysts expect. EPA's FAQ states that ECHO "generally covers four major environmental statutes over the past five years", and that EPA regulates facilities under many other programs not shown in ECHO. A clean ECHO result is therefore a statement about specific programs, not a plant's whole regulatory footprint.

The fields that carry the decision

Before interpreting a row, the analyst needs eight fields: source system, media program, program ID, permit or operating status, extract date, event date (inspection, violation, or action), status or resolution text, and penalty. Each has a documented trap.

- **Event dates.** The violation start date "is normally when the government first became aware of the violation" (echo.epa.gov), so it is a discovery date. For air evaluations, the last-activity date is when a full compliance evaluation was completed and "may or may not correspond to an actual site visit".
- **Status text.** "No Violation Identified" means "no violations recorded in the national systems of record" (echo.epa.gov). For air, ECHO adds that this "does not mean that the facility is currently in compliance with all applicable requirements".
- **Open or resolved.** An unresolved air violation is inferred from "the lack of a Resolved Date in ICIS-Air", so a missing date can reflect an unentered date. The reverse also occurs: a facility may have corrected a violation that EPA or the state has not verified.
- **Permit status.** An NPDES (National Pollutant Discharge Elimination System) permit can be Effective, Administratively Continued, or Expired. Permits run for at most five years, so an expired-looking date on a continued permit is not by itself a finding.
- **Penalty.** The Detailed Facility Report counts only actions entered in the national program databases, and the case-search federal penalty field excludes amounts shared with state or local entities.

What "major" and "generator" mean in the program IDs

Program categories shape how complete a record is likely to be. A Clean Air Act Title V major source includes one with the potential to emit 100 tons per year or more of any air pollutant (www.law.cornell.edu), a test based on potential, not actual, emissions (www.law.cornell.edu). Under RCRA, a large quantity generator produces 1,000 kilograms or more of non-acute hazardous waste per month (www.law.cornell.edu), a small quantity generator more than 100 but less than 1,000 kilograms (www.law.cornell.edu), and a facility's category "may change from month to month" (www.law.cornell.edu). The non-acute quantities above are partial federal category tests; acute hazardous waste has separate thresholds (EPA guidance). A "major" or "large" label is thus a regulatory category, not a statement about conduct, and ECHO's data are most complete for these larger categories.

Terms that are easy to conflate

The DFR data dictionary treats the priority flags as separate regimes. A CAA High Priority Violation includes emission-limit violations that continue for at least seven days, and the designation is removed only when all federal and state administrative and judicial action is complete (echo.epa.gov). For CWA, most SNC designations come from automated analysis of Discharge Monitoring Reports, and GAO found that failure to submit those reports is the leading cause of SNC designations (www.gao.gov). RCRA and drinking water programs use their own criteria and removal rules. Words such as "significant" or "priority" therefore describe different tests in different programs.

The Evidence Ladder: What Each Row Type Supports

Each ECHO row is a claim at one rung of a six-rung ladder, and the analyst should write the claim at that rung and no higher.

Rung 1: a recorded permit, registration, or inspection

A permit or inspection date shows that a regulator recorded an activity. It supports "this program tracks the facility" but not a statement about the result. The inference "no recent inspection means low regulatory attention" is unsafe, because ECHO notes that inspections for smaller CAA and CWA facilities may be tracked only in a state database, and a smaller facility may appear uninspected.

Rung 2: a violation identified

A "Violation Identified" status or a quarters-in-noncompliance count supports "a regulator recorded a violation status in the period". ECHO says such characterizations "should be considered alleged violations". The "Qtrs with NC" figure mixes severity levels and is counted out of twelve official quarters plus a thirteenth unofficial one, and the latest quarter is draft until it becomes official (echo.epa.gov). The analyst should write "ECHO records a violation status in N of 12 quarters", not "the plant violated".

Rung 3: a priority flag (SNC, HPV, or enforcement priority)

A priority flag supports "the program classified the matter at its most serious level at that time". EPA's FAQ calls it the most serious level of violation noted in EPA databases. Air violations are not treated as resolved until the source is in full physical compliance and penalties are paid, so a flag can outlast a settlement. A peer-reviewed analysis of CAA High Priority Violations found a median of 36 months in HPV status, equal to the length of ECHO's noncompliance record, so observed durations are lower bounds (iopscience.iop.org). The same paper notes that some states do not report a violation until after the case is prosecuted or settled (iopscience.iop.org). Flag duration alone is thus a weak measure of severity.

Rung 4: a formal action that has concluded

ECHO treats informal actions as typically addressing less serious violations and formal actions as typically addressing more serious ones that may be independently enforceable. A concluded formal action supports "a regulator took, and concluded, a formal step on this date, with the stated federal penalty". It does not support statements about intent. EPA states that environmental civil liability is strict and "arises simply through the

existence of the environmental violation" (www.epa.gov), and ECHO notes that in most settlements there is no direct admission of liability. A 2010 EPA guidance document adds that a notice of violation is, in the majority of instances, not considered a formal action (www.epa.gov), so a state's "NOV" label should not be assumed to map to ECHO's formal-action count. The statutory menu behind these actions is broad: the Clean Air Act allows administrative penalty orders and civil judicial actions (www.law.cornell.edu); separately, the Clean Water Act sets out EPA's primary federal enforcement authorities in section 309 (EPA).

Rung 5: unresolved or missing information

Some silence is built into the record. The Detailed Facility Report formal-action section "generally does not include data regarding enforcement referrals or criminal enforcement actions", and GAO found that EPA does not consistently collect or maintain data on informal enforcement actions (www.gao.gov).

Rung 6: no ECHO record

A blank search supports a single claim: the search, with stated parameters and on a stated date, returned nothing. It cannot support the claim that the plant is compliant, unregulated, or unremarkable. Small CAA facilities need not be entered into EPA's database, and undiscovered violations can look compliant. For NPDES single-event violations, states must share data with EPA's ICIS-NPDES; the stated exception covers construction stormwater inspections where the state takes no formal enforcement action (EPA Data Entry Requirements). EPA's January 2025 data-sharing guidance describes SEV sharing for all NPDES-regulated entities and the construction-stormwater exception. A missing national record does not establish an absence of a reporting obligation. Before logging "no record", rerun the search by permit ID, Registry ID, and address, and confirm inactive facilities were not filtered out.

Comparing ECHO Views, Time Windows and State Records

The same plant can look different depending on the ECHO view, and different again against the state regulator's system. *Table 1* below summarizes the windows and what each source can and cannot show.

Source / view	Window EPA states	Good for	Documented limit
Facility search results	Past five years of inspection and enforcement data from the extraction date	Screening a list of matched plants	Results limited to 100,000 records; older actions not included
Detailed Facility Report (DFR)	Ten years of compliance and enforcement data; compliance monitoring defaults to five years	Reading dated rows for one plant, by program	Latest quarter is draft
Compliance quarters	Three years, in three-month periods by federal fiscal year	Seeing persistence of a status	Count mixes severity levels

Source / view	Window EPA states	Good for	Documented limit
Enforcement Case Search	All years of EPA formal enforcement data from ICIS; criminal records have the cutoff noted here	Finding concluded civil cases and historical criminal cases	State-lead cases limited to CAA stationary sources and CWA dischargers. The Summary of Criminal Prosecutions has not been updated with concluded criminal enforcement records from FY2024 onward (EPA About the Data)
Data Downloads	Additional years of data	Reproducible bulk pulls	Quality before November 2000 not assessed
Corporate Compliance Screener	User-selected settlement period	Grouping name-matched facilities	No corporate-family linkage (echo.epa.gov)
State regulator systems	Set by each state	State permits, inspections, local records	State agency "may have additional information"

Windows are not interchangeable: a five-year facility search and a ten-year Detailed Facility Report can disagree on whether an older matter exists, and neither is complete. Tools that group facilities by company are weaker than those describing one plant: the Corporate Compliance Screener says its name search may over-select records, which is why the matched-facility list is built upstream and then looked up by ID.

Why state records differ

States run most programs. A Congressional Research Service report states that "states hold the primary responsibility for implementing many federal pollution control programs" (www.congress.gov), with delegated authority covering permits, inspections, and enforcement (www.congress.gov). State or local agencies are usually the CAA permitting authority (www.epa.gov), NPDES permits are issued by EPA or authorized states (www.epa.gov), and state RCRA programs must be at least as stringent as federal requirements (www.epa.gov). States also differ in what they send upward. ECHO's data-entry matrix says completeness may vary widely from state to state, and EPA's 2015 NPDES reporting rule recorded that authorized programs had focused on major facilities (www.govinfo.gov). A state system can therefore hold records ECHO lacks.

State portals show how varied the alternatives are. Texas rates compliance history on a five-year lookback updated each September 1 and March 1 (www.tceq.texas.gov). New Jersey publishes an enforcement report listing actions issued in the past 14 days (nj.gov). Michigan's portal gives access to permits and violation notices but states it is not a complete record for a site (www.michigan.gov). Louisiana says its records system holds all official records created or received by the agency (www.deq.louisiana.gov). Florida offers an online tool to retrieve permitting and compliance records (floridadep.gov), Illinois publishes enforcement orders (epa.illinois.gov), and California's hazardous waste regulator describes a system for tracking cleanup, permitting, enforcement, and investigation efforts (dtsc.ca.gov). New York offers an interactive map of thousands of agency documents (www.dec.ny.gov), and Massachusetts offers a search of permits, facilities, inspections, and enforcements (www.mass.gov). Pennsylvania states that its eFACTS contains Department of Environmental Protection compliance information only (www.ahs.dep.pa.gov). None maps one-to-one onto an ECHO field, so each state record is an independent source with its own window and vocabulary. Confirm jurisdiction-specific wording with the relevant agency before repeating it.

Two documented tensions to preserve

EPA's own materials do not always align, and the analyst should keep both statements. The About the Data page says states are "not required to report violations occurring at Clean Water Act non-major facilities", while a footnote on the Data Entry Requirements page says states must share single-event violation data with EPA, with a stated exception for certain construction stormwater inspections. For this screen, do not apply the overview's blanket non-major exemption: use the specific Data Entry Requirements guidance and its stated exception. Log incomplete actual reporting separately from an absence of a legal reporting obligation. Part 127 specifies electronic reporting by NPDES permittees (www.law.cornell.edu), defines a minimum set of NPDES data that authorized programs transfer to EPA (www.law.cornell.edu), and lists data sources and minimum submission frequencies for ten data groups (www.law.cornell.edu). Likewise, the Enforcement Case Search covers "all years" of formal EPA actions, yet the Data Downloads page cautions that quality before November 2000 has not been assessed. The analyst should state the filters used and the date range returned.

Implementation Considerations: Escalation Matrix, Worksheet and Refresh

Step 0: confirm the match is reconciled

Begin only after the entity, facility, and Registry ID or program ID are reconciled. EPA says FRS "attempts to match new reported sites to existing sites" (www.epa.gov), with periodic and not immediate refreshes. ECHO uses FRS to link records about the same facility. A match resting on a name alone is "unreconciled" and stays out of the tally below.

Step 1: capture a snapshot

Save the page or export with the extraction date and search parameters. For more than a handful of plants, ECHO directs high-volume users to Data Downloads, notes a limit on facilities shown per query, and says it is not designed for robotic queries. The weekly Exporter file is a better dated record than a screenshot.

Step 2: classify the rung and assign an escalation level

Table 2 below turns the ladder into a research escalation matrix. The levels describe research effort, not risk.

Evidence class (rung)	What the row supports	What it does not support	Escalation level and next official source
No ECHO hit (6)	The named search returned no row on the stated date	Compliance, absence of regulation, absence of state records	**L1: clarify.** Rerun by ID and address; check the state regulator system; log as unknown
Permit or inspection only (1)	A regulator tracks the facility; an activity was recorded	Any outcome	**L0: log.** Snapshot and refresh date; open the DFR if the inspection date is old

Evidence class (rung)	What the row supports	What it does not support	Escalation level and next official source
Historical violation, resolved (2)	A violation status was recorded earlier and later shows a resolved date	That the condition is currently corrected; that no related matter exists	**L1: clarify.** Read DFR dates and resolution fields; check case search for a related action
Recorded current or unresolved violation without a priority flag (2)	A violation status is positively recorded; the record does not show resolution	A priority designation, a final adjudication, or the present physical condition	**L2: escalate.** Obtain the violation details and state record; have a named reviewer assess the unresolved requirements
Current priority flag, or flag within the recency window (3)	The program classified the matter at its most serious level at the displayed date or quarter	A finding of liability; the cause; status after the displayed date	**L2: escalate.** Reviewer sign-off; pull program and state records; refer to an environmental professional
Concluded formal action within the recency window (4)	A formal step concluded on a date, with a stated federal penalty	Intent; present condition; full cost or scope	**L2: escalate.** Read case fields; request the order or settlement text from the agency
Older formal action with outstanding requirements (4)	The action record or order identifies requirements still outstanding	That the age or conclusion of the case ends those requirements	**L2: escalate.** Obtain the order, compliance schedule, and agency status confirmation
Older formal action with completion documented (4)	The cited official record documents completion of the action's requirements	That no related or later matter exists	**L1: clarify.** Save the completion evidence and check for related or later records
Missing field or uncertain resolution (5)	The record lacks information needed to determine status	Either a clean or an adverse reading	**L1: clarify.** Name the missing field; contact the data steward or agency. If an older action's obligations cannot be determined, use this route

For this analyst protocol, “recent” means within the 12 calendar months ending on the screening date, inclusive. Record that date and the event or quarter-end date used. This convention is not an EPA severity rule. A current priority flag or a positively recorded unresolved violation receives L2 regardless of age; an older resolved priority flag receives L1 unless another L2 route applies.

Evaluate every program ID and applicable evidence class, retaining their dates and source records in the facility worksheet. Count each reconciled facility once at its highest escalation level (L2 before L1 before L0). For ties, select the controlling class in this order: priority flag; outstanding formal-action requirements; current or unresolved non-priority violation; recent concluded formal action; missing information; resolved history; no hit; permit or inspection only. Break remaining ties by the latest dated record, then alphabetically by program ID; put undated records after dated records. Keep all other applicable classes and unresolved questions in the same worksheet row. These are reproducibility conventions for this protocol.

The matrix prescribes clarification and a state check for a blank result, and escalation with the official record for positively recorded unresolved matters or recent priority flags and formal actions.

Step 3: fill the reconciliation worksheet

Each matched facility gets one worksheet row with these fields:

- **Target and entity ID**: the corporate entity and the upstream identifier.
- **Facility ID**: the FRS Registry ID and each program ID.
- **Program and permit**: media (CAA, CWA, RCRA, SDWA) and permit or handler status.
- **Source and extract date**: the ECHO view, the underlying system, and its extraction date.
- **Action date**: inspection, violation, or action date, with the date type (discovery, determination, settlement).
- **Violation and status text**: copied verbatim, with the DFR or search label.
- **Source URL**: the exact report or search URL and the access date.
- **Asserted fact**: one sentence limited to what the row supports.
- **Unresolved question**: what the row cannot answer.
- **Analyst decision**: L0, L1, or L2.
- **Reviewer**: a named person and a sign-off date.
- **Next official source**: the agency record to request or check.

A good entry reads: "DFR (extract date X) shows a priority flag in the most recent official quarter; whether it persists, and why, is not shown." A poor entry reads: "plant is in significant noncompliance."

Step 4: refresh and sign-off

A screening note decays. Extracts move weekly, the stated lag between source entry and ECHO display runs up to three months, and EPA's FAQ says the lag could be several months. As the analyst's own convention, not an EPA requirement, re-pull every L1 or L2 row immediately before the note is relied on, and stamp both dates on the worksheet. By analogy, EPA's All Appropriate Inquiries rule requires certain components, including the government records review, to be conducted or updated within 180 days before acquisition (www.law.cornell.edu); AAI governs a different process, so this is context only.

Reviewer sign-off covers three questions: does each asserted fact stay at its rung, does each unresolved question name a next official source, and does the note avoid conclusions that belong to a professional. Reviewers should also check ECHO's Known Data Problems page before treating an anomaly as real. Record the criminal-data coverage limit in Table 1 in the snapshot. For recent criminal matters, supplement the case search with current official enforcement releases or agency records, and retain the dates and sources checked.

How this differs from environmental due diligence

An ECHO screen is not a Phase I environmental site assessment (ESA) or All Appropriate Inquiries (AAI). The AAI rule requires a review of federal, tribal, state, and local government records for the subject property (www.law.cornell.edu), with the environmental professional identifying data gaps (www.law.cornell.edu), and EPA recognizes ASTM E1527-21 as consistent with the rule (www.epa.gov). ASTM E1527-21 describes itself as site-specific (www.astm.org), aims to identify recognized environmental conditions (www.astm.org), and does not address many issues raised in purchases of business entities (www.astm.org). EPA's final rule states that use of the ASTM standard is not required (www.federalregister.gov). Because liability under the

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) can attach solely through ownership (www.epa.gov), and bona fide prospective purchaser protection depends on having made all appropriate inquiries (www.law.cornell.edu) and meeting continuing conditions (www.law.cornell.edu), whether and how to commission formal diligence belongs to deal counsel and qualified environmental professionals.

Data Analysis and Evidence

Scale and reliability benchmarks

- **Enforcement volume.** EPA reported concluding 2,127 civil enforcement cases in fiscal year 2025, the highest in nine years, against 1,851 reported for fiscal year 2024 (19january2025snapshot.epa.gov).
- **Inspection volume.** EPA counted nearly 8,300 inspections in fiscal year 2025 (www.epa.gov), defining an inspection as on-site, with off-site monitoring counted separately. The ten-year series dips to about 3,200 and 3,300 in two fiscal years (www.epa.gov), so a year with no recorded inspection can reflect program-wide conditions.
- **Judicial versus administrative.** Civil judicial conclusions fell from 104 to 49 over ten years (www.epa.gov). EPA describes administrative actions as non-judicial actions taken by EPA or a state under its own authority (www.epa.gov) and judicial actions as formal lawsuits filed in court, so most action rows an analyst sees will be administrative.

Coverage and interpretation limits

The CAA minor-source universe is also undercounted in ECHO, because states are only required to enter a subset of minor sources into ICIS-Air. Studies face selection problems: one analysis of state hazardous waste enforcement notes that compliance data exist only if a facility is inspected (link.springer.com), and an arXiv preprint on a narrow land-application setting cautions that annual reports show signs of significant under-reporting (arxiv.org). A Public Policy Institute of California analysis used ECHO's count of quarters out of compliance over three years (www.ppic.org) and noted that severity points accumulate for unaddressed issues (www.ppic.org), which shows the scoring must be understood before the count is used.

Illustrative tally with the denominator (Hypothetical Example)

Table 3 below shows how a team might summarize a batch of matched facilities. **All counts are fictional and illustrative.** The table counts worksheet classifications for a hypothetical batch. It is not a compliance rate and not a comparison of facilities or companies.

Worksheet classification (Hypothetical Example)	Matched facilities (count)	Denominator	Typical next step
Recent formal action or priority flag (L2)	4	40 matched facilities	Reviewer sign-off and official record request
Older issue, resolved date shown (L1)	9	40 matched facilities	Read DFR dates and resolution fields

Worksheet classification (Hypothetical Example)	Matched facilities (count)	Denominator	Typical next step
No ECHO record on the stated date (L1)	17	40 matched facilities	Rerun by ID; check the state system
Matched facility; compliance fields unknown (L1)	10	40 matched facilities	Name the missing compliance field; check the state record
Total classified	40	40 matched facilities	Counts sum to the denominator

All 40 facilities have reconciled matches, including the ten whose compliance fields are unknown. The denominator is matched facilities only. Report unreconciled candidates separately, outside this tally; this hypothetical example supplies no count for them. The largest cells, no record and unknown, are where ECHO is silent: 27 of the 40 hypothetical rows carry no statement about compliance either way, and a summary reporting only the four L2 rows would misdescribe the batch. The output is a work plan, not a finding.

Case Studies: Three Hypothetical Examples

The three examples below are fictional. They name no real facility or company, and each ends in a research question or escalation, not a legal conclusion.

Historical resolved issue (Hypothetical Example)

An analyst screening a hypothetical metal-finishing plant, "Plant A", finds in the Detailed Facility Report a CWA noncompliance status in the first six of the twelve completed quarters displayed in the three-year history. The later six displayed quarters show a return to compliant status, and the report includes a recorded informal action with a resolved date. This is rung 2 with a resolved date, classified L1.

The row supports: a regulator recorded a violation status in earlier quarters and later recorded resolution. It does not support: that the cause is corrected, or that no related matter exists. Informal actions typically address less serious violations, and repeat CWA SNC is normally addressed through formal action while Category I violations are often handled informally. The open questions are whether the status was driven by a missed report rather than an exceedance (missing reports are the leading cause of SNC designations (www.gao.gov)) and whether the permit has been administratively continued. Next sources: the state permit file and the Enforcement Case Search. Decision: L1, log with dates, no escalation.

Recent significant noncompliance (Hypothetical Example)

For "Plant B", a hypothetical chemical blending plant, a facility search filtered on significant violation returns a CAA HPV flag in the most recent quarter. ECHO describes that filter as finding facilities in more severe noncompliance for the most recent quarter. This is rung 3, classified L2.

The row supports: the program classified the matter at its most serious level for that quarter. It does not support: a conclusion about cause, scale, or whether an action is pending. For this CAA example, record the extraction date and the displayed Current As Of date, which reflects the most recent data refresh (EPA DFR dictionary). Reported status may change; the flag persists until all action is complete, and unconcluded actions

are not displayed. The open questions are when the regulator first became aware, whether a formal action has been opened or concluded, and what the state record says. Next sources: the DFR enforcement section, the Enforcement Case Search, and the state air agency. Decision: L2, reviewer sign-off, and a referral note recommending that a qualified environmental professional or counsel review the official record before any reliance.

No ECHO hit (Hypothetical Example)

For "Plant C", a hypothetical small packaging site, the name search returns nothing. This is rung 6, classified L1. The analyst reruns the search with the Registry ID, address, and permit ID, and confirms inactive facilities were included. Still nothing.

The result supports: no ECHO row on the stated date under the stated parameters. It does not support: that the site is compliant or unregulated. Small CAA facilities need not be in EPA's database, a smaller facility may appear uninspected because inspections are state-tracked, and EPA cannot positively state that facilities without violations shown are fully compliant. The next official source is the state regulator system. Decision: L1, log "unknown, state check pending", and do not record the plant as clean.

Implications and Future Directions

Reading volume. Aggregate enforcement activity is not stable year to year; EPA's inspection series fell to roughly 3,200 in two fiscal years before recovering. EPA's State Review Framework exists because national data may not reflect state activity: its reviewer guide addresses the case where data in the national systems do not accurately reflect state activities (www.epa.gov), and the framework consistently assesses EPA and state enforcement under the CWA, CAA, and RCRA (www.epa.gov).

Governance. The temptation is to turn the tally into a score. Keep it as counts with the matched-facility denominator, report the unknown and no-record cells as findings in their own right, and avoid any label that implies a compliance rating. Decisions to progress, pause, or price a target belong to the deal team with professional advice.

Open items. As of October 2026, no current multi-program completeness benchmark was found, and the independent figures cover specific programs and earlier years. EPA's 2014 CAA High Priority Violation policy document could not be retrieved, so the current timeline for addressing a flagged violation is not stated here. State vocabularies and windows vary and must be confirmed with each agency.

Frequently Asked Questions (FAQs)

How do I read an EPA ECHO facility report for due diligence screening?

Start with the Detailed Facility Report, which is organized into six primary sections, and go to the section that summarizes the history of enforcement and compliance activities. Record the extract date, program, permit status, each row's date, and the resolution field, then write what the row supports and what it does not.

What does significant noncompliance mean in ECHO, and how does it differ from a high priority violation?

Significant Noncompliance (SNC) and High Priority Violation (HPV) are program-specific versions of the same idea: the most serious violation level, assigned by a regulator at a point in time and not a final adjudication (echo.epa.gov). HPV applies to the Clean Air Act, with criteria such as emission-limit violations lasting at least seven days. SNC applies to the Clean Water Act and RCRA, with CWA designations mostly from automated Discharge Monitoring Report analysis. Drinking water uses an enforcement priority designation. The tests differ, so labels should not be compared across media.

What do ECHO compliance status codes mean?

The All Media results use four overall status values: Significant Violation (the SNC or HPV level, depending on statute), Violation Identified, No Violation Identified, and Unknown. No Violation Identified means no violations are recorded in the national systems of record, which is different from confirmed compliance. Quarter-level counts and program flags are read from the Detailed Facility Report as described above.

Does a blank ECHO search mean the plant is clean?

No. ECHO covers four major statutes, small facilities may not be in the national database, and the state agency may hold additional information. Log "no ECHO record on the stated date" and check the state system.

What is a private equity environmental risk screening checklist for ECHO?

A compact checklist, which is a research aid and not environmental due diligence:

- **Match:** confirm the Registry ID or program ID is reconciled to the facility.
- **Snapshot:** save the view, parameters, and extract date.
- **Windows:** note which of the five-, ten-, and three-year views was used.
- **Rung:** classify each row on the six-rung ladder.
- **Gaps:** list statutes, programs, and states not covered.
- **Decision:** assign L0, L1, or L2 with a named reviewer.
- **Source:** name the next official record to request or check.

Is an ECHO lookup a substitute for a Phase I environmental site assessment?

No. ASTM E1527-21 is site-specific, aims to identify recognized environmental conditions (www.astm.org), and does not address many issues in purchases of business entities (www.astm.org). Whether and how to commission formal diligence is a question for counsel and qualified environmental professionals.

Conclusion

ECHO is a valuable first look at a matched plant because it brings permits, inspections, violation statuses, actions, and penalties from several national systems into one place. Its value to a private-equity research team depends on reading each row at the rung it can bear. A permit or inspection shows that a regulator tracks the

plant. A violation status is, in ECHO's own words, to be considered alleged until adjudication. A priority flag is a program classification at a point in time. A concluded formal action is a dated regulatory step with a stated federal penalty. A blank or silent field says nothing about compliance.

Because those rungs support different claims, they call for different next steps. A blank search leads to an ID-based rerun and a state check. A historical resolved row leads to a read of the dated fields and a related-case search. A recent priority flag or formal action leads to escalation with the official record and a named reviewer, and to referral to qualified professionals for anything beyond the desk screen. The tally keeps the matched-facility denominator visible so counts are never mistaken for a rate.

Source links

Links cited in this article, in order of first appearance. Full addresses are provided for readers using extracted text.

1. https://echo.epa.gov/resources/echo-data/about-the-data
2. https://echo.epa.gov/resources/general-info/echo-faq
3. https://echo.epa.gov/help/reports/dfr-data-dictionary
4. https://www.congress.gov/crs-product/R48961
5. https://www.epa.gov/enforcement/enforcement-and-compliance-assurance-annual-results-fy-2025-civil-enforcement
6. https://www.atsdr.cdc.gov/pha-guidance/resources/resources_getting_familiar_with_the_site.html
7. https://public-inspection.federalregister.gov/2023-03824.pdf
8. https://www.epa.gov/system/files/documents/2021-11/_epaoig_20211117-22-e-0008.pdf
9. https://govinfo.gov/content/pkg/FR-2018-06-08/pdf/2018-12375.pdf
10. https://echo.epa.gov/help/facility-search/all-data-search-results-help
11. https://www.law.cornell.edu/cfr/text/40/70.2
12. https://www.law.cornell.edu/cfr/text/40/260.10
13. https://www.law.cornell.edu/cfr/text/40/262.13
14. https://www.epa.gov/hw/how-safely-dispose-e-cigarettes-information-schools-and-small-businesses
15. https://www.gao.gov/assets/gao-21-290.pdf
16. https://iopscience.iop.org/article/10.1088/1748-9326/ad416d
17. https://www.epa.gov/enforcement/enforcement-basic-information
18. https://www.epa.gov/sites/default/files/2013-11/documents/actiondefs.pdf
19. https://www.law.cornell.edu/uscode/text/42/7413
20. https://www.epa.gov/enforcement/clean-water-act-cwa-and-federal-facilities
21. https://www.gao.gov/assets/gao-20-95.pdf
22. https://echo.epa.gov/resources/echo-data/data-entry-requirements
23. https://www.epa.gov/system/files/documents/2025-01/npdesereporting-datasharingguidance.pdf
24. https://echo.epa.gov/facilities/compliance-screener
25. https://www.epa.gov/clean-air-act-overview/government-partnerships-reduce-air-pollution
26. https://www.epa.gov/npdes/npdes-permit-basics

27. https://www.epa.gov/rcra/state-authorization-under-resource-conservation-and-recovery-act-rcra
28. https://www.govinfo.gov/content/pkg/FR-2015-10-22/html/2015-24954.htm
29. https://www.tceq.texas.gov/compliance/enforcement/compliance-history/about.html
30. https://nj.gov/dep/enforcement/reports-list.html
31. https://www.michigan.gov/egle/maps-data/mienviroportal/site-map-explorer
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46. https://www.epa.gov/brownfields/brownfields-all-appropriate-inquiries
47. https://www.astm.org/e1527-21.html
48. https://www.federalregister.gov/documents/2022/12/15/2022-27044/standards-and-practices-for-all-appropriate-inquiries
49. https://www.law.cornell.edu/uscode/text/42/9601
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53. https://link.springer.com/article/10.1023/A:1021827329582
54. https://arxiv.org/pdf/2208.08919
55. https://www.ppic.org/blog/information-gaps-hinder-progress-safe-drinking-water
56. https://www.epa.gov/sites/default/files/2019-11/documents/srf_round_4_reviewers_guide_final_7-31-18.pdf
57. https://www.epa.gov/compliance/state-review-framework

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