# Environmental Due Diligence Audit (EDDA)

## EHS Risk Identification and Quantification in M&A Transactions

**Environmental Due Diligence Audit (EDDA) is Phase I of the environmental due diligence carried out in an M&A transaction: it identifies and quantifies the target's EHS compliance risks through document review and a site walkthrough. Where documents and site access are not sufficient to conclude on soil and groundwater conditions, the work moves to Phase II — Environmental Site Assessment — with sampling and laboratory analysis.**

This document sets out the scope, working method and deliverables of the WESSLING EDDA. Our latest complete audit lists comprise 149 items in the Phase I document list and 171 items in the on-site audit list. The appendices show only the structure overview and Module 1 as an example; the complete lists are tailored to the target's actual conditions after engagement. Scope, schedule and fees are subject to the agreed commercial quotation and statement of work.

## 1. What EDDA Resolves

Environmental and safety risks rarely appear on the financial statements, yet they surface after closing — as fines, forced stoppages, remediation costs or third-party claims. EDDA finds these risks before closing, determines them precisely and converts them into amounts that can be written into the transaction documents.

**For a buyer, EDDA answers three questions:**

- Does the target hold every EHS permit and licence required for lawful operation, and are any of them missing, expired or inconsistent with the actual scope of activity?
- Is the EHS management system genuinely operating, and does the site condition match what the documents say?
- If there is historic contamination or a compliance gap, how much will remediation cost and who should bear it?

## 2. Scope of Services: Two Phases

EDDA is delivered in two phases.

| Phase I EHS Compliance Audit | Phase II Environmental Site Assessment |
|---|---|
| Document review + site walkthrough: a 149-item document list and a 171-item on-site audit list, covering environment, safety, occupational health, fire protection, emergency response and compliance performance. Lists can be tailored to your specific areas of concern. | Evidence is taken below ground: enquiries with authorities, review of technical and historical records, building contaminant assessment, and soil, groundwater, and emission sampling with laboratory analysis. |
| **Deliverables: compliance gap list, first assessment of financial exposure, recommendation on whether Phase II is required** | **Deliverables: site investigation report, contaminant distribution and concentrations, remediation cost estimate** |

## 3. Phase I: EHS Compliance Audit

### 3.1 How We Work

- Document review: EHS documents of the target company are collected against the document list (Appendix A) and checked item by item for completeness, validity and internal consistency.
- Checklist-based assessment: the 149 items of the Phase I document list are rated across four dimensions — permits, licences and qualifications, governance and management system.
- Site walkthrough: the facility is walked against the on-site audit list to verify that "what the documents say" matches "what is done on site".

- Interviews: separate interviews with the EHS manager and with production, warehousing and environmental facility operators to cross-check the authenticity of records.
- Gap determination: findings are classified as compliance defects, management defects or potential risks, with a first estimate of remediation and penalty amounts.

### 3.2 Four Dimensions of Review

| | |
|---|---|
| **EHS permits** | Pollutant discharge permit, drainage permit, hazardous waste handling/transfer, radiation safety licence, water abstraction permit — checked against scope, validity and the actual process. |
| **Licences & qualifications** | Business licence scope, work safety licence, special equipment registration, fire acceptance / filing, occupational health related permits. |
| **Governance structure** | EHS organisation setup, dedicated staff and qualifications, signed responsibility statements, safety expenditure provisioning, liability insurance. |
| **Management system** | Evidence of ISO 14001 / 45001 operation, consistency between procedures and execution records, training and emergency drill records. |

### 3.3 Deliverables

- Compliance gap list: every missing, expired or non-conforming item, with legal basis, risk rating and remediation proposal.
- First assessment of financial exposure: indicative ranges by remediation investment, potential administrative fines, production-loss and third-party claims.
- Transaction inputs: suggested representations and warranties, specific indemnities, price adjustment or escrow mechanisms for the transaction documents.
- Phase II recommendation: whether Phase II is necessary, plus proposed sampling locations and media scope.

## 4. Phase II: Environmental Site Assessment

Phase II is recommended where any of the following applies: the historic use is unclear or the site previously hosted polluting production; the walkthrough reveals suspicious contamination; documentation is missing and compliance cannot be self-evidenced; the transaction requires a clear conclusion on soil and groundwater; or the authorities require a site investigation report.

### 4.1 Four Lines of Investigation

- Enquiries with authorities: regulatory records, penalty history and complaints relating to the target, obtained from ecology and environment, emergency management and natural resources authorities.
- Technical records and historical study: historic aerial imagery, geological and hydrogeological data, historic processes and raw material lists, used to reconstruct how site use evolved.
- Building contaminant assessment: identification and sampling of hazardous building materials such as asbestos, lead-containing paint and PCBs.
- Environmental media sampling: soil, groundwater, surface water, waste gas and noise samples analysed by an accredited CMA / CNAS laboratory; WESSLING designs the sampling plan, supervises sampling and interprets the data.

### 4.2 Assessment Benchmarks and Deliverables

Soil is assessed against GB 36600 (development land) and GB 15618 (agricultural land), groundwater against GB/T 14848, and waste gas, wastewater and noise against the applicable sector emission standards together with GB 12348 and GB 3096.

- Site environmental investigation report: contamination identification, sampling design, results and exceedance assessment.
- Extent and severity of contamination: contaminant types, concentrations, affected area and exposure pathways.
- Remediation cost estimate: costed by alternative technology routes, for transaction pricing and allocation of responsibility.
- Risk management recommendation: whether remediation must be completed before closing, or whether risk control measures with ring-fenced funding are appropriate.

## 5. How Findings Flow into the Transaction Documents

The value of EDDA lies not in listing problems but in converting them into protective clauses in the transaction documents. The table below sets out the common routes, for use by your legal and investment teams.

| | |
|---|---|
| **Permits missing, expired or out of scope** | Made a condition precedent: to be completed before closing. Where completion is impossible, carve out in the representations and warranties and set a specific indemnity. |
| **Risk of administrative fines or forced stoppage** | Specific indemnity or escrow sized to the estimated amount, with an agreed liability period. |
| **Historic contamination, soil or groundwater exceedances** | Allocate remediation responsibility and funding; if necessary use instalment payment or retention of part of the consideration. |
| **Formalistic management system, incomplete records** | Written into the agreement as a post-closing remediation obligation (CAPA), with deadline and acceptance method. |

## 6. What We Need from the Client

- Single point of contact: one EHS or production manager familiar with the site, to avoid documents arriving from several directions.
- Document preparation: provide the documents on our document list; electronic copies are sufficient, and confidential documents may be reviewed on site without copying.
- Site arrangements: one to two days for the walkthrough, with escorts and access arranged along the route in the on-site audit document.
- Interviews: around 30 minutes each with staff from EHS, production, warehousing and environmental facility operation.
- Test support: tests involving water discharge, power cut or equipment actuation in the on-site audit must be operated by the client's personnel; WESSLING observes and records.

The degree of cooperation directly affects the reliability of our conclusions. Where documentation is incomplete, we state "unable to determine" in the report and flag the risk conservatively.

## 7. About WESSLING

WESSLING China was established in 2013 building on more than four decades of German consulting heritage from the WESSLING Group, it combines German quality standards with Chinese local expertise — the combination our clients value most. WESSLING China operates no laboratory of its own and focuses on QHSE (quality, health, safety, environment) consulting, analysis and engineering.

### Capabilities relevant to this project

- Independent third party: focused on QHSE consulting and analysis, with no remediation works — conclusions are free of construction interests and usable directly in negotiations.
- German standards with local expertise: the Group's methodology and quality requirements applied to current Chinese law and enforcement practice.
- Controlled analysis chain: samples go to accredited CMA / CNAS laboratories while we own the sampling design, supervision and interpretation — a fully traceable data chain.
- Regulatory tracking: checklists are built on the regulations in force in 2026 and revised as legislation changes.

Questions on the services described here, or a need to tailor the scope to a specific target: please contact us at +86 (021) 3372 5367, by e-mail at contact@wessling.cn, or visit www.wessling-consutling.com.

# Appendix A EHS Document Request List: Structure Overview and Module 1 Example

The complete document list is designed around all compliance elements — environment, safety, occupational health, fire protection, emergency response and compliance performance — and contains 9 modules with 149 items. This appendix shows only the structure overview and Module 1 as an example; the complete list is tailored to the target's actual conditions after engagement. Module 1 (General Compliance & Permits) is given in full below to illustrate the format of the items — each carries an applicability code, legal basis and provision requirement.

## A.1 Structure Overview

| No. | Module | Items | Main content |
|---|---|---|---|
| 1 | **General Compliance & Permits** | 12 | Business licence and land title, site layout plan, process and raw materials, EHS organisation and personnel, inventory of existing environmental approvals |
| 2 | **Construction Projects – "Three Simultaneous" & Approvals** | 17 | EIA approval, environmental completion acceptance, work safety and occupational health "three simultaneous", fire acceptance and filing |
| 3 | **Discharge Permit, Monitoring & Records** | 13 | Discharge permit, self-monitoring plan and reports, online monitoring O&M, wastewater / waste gas / noise monitoring records, logbooks and compliance reports |
| 4 | **Pollution Control, Solid & Hazardous Waste** | 18 | Wastewater and waste gas treatment facilities, hazardous waste storage and transfer manifests, general industrial solid waste, soil and groundwater, radiation sources |
| 5 | **Environmental Management & Low Carbon** | 13 | Environmental management system, mandatory environmental disclosure, cleaner production audit, energy and carbon emissions, environmental tax and environmental credit rating |
| 6 | **Work Safety** | 34 | Responsibility system and safety expenditure, training and special operations, special equipment, hazardous work permits, machinery and electrical safety, contractor management, liability insurance and incident records |
| 7 | **Occupational Health** | 13 | Occupational hazard declaration and periodic monitoring, health surveillance files, PPE, warning signs, radiation and heat work |
| 8 | **Fire Protection & Emergency** | 21 | Fire acceptance and filing, maintenance and inspection of fire facilities, evacuation routes and fire control room, emergency plan filing, drill records and emergency supplies |
| 9 | **Compliance Performance & Remediation** | 8 | Administrative penalties and remediation records of the last three years, complaints, inspections and regulatory records, prior audit findings and their closure |

Total 149 items. Applicability codes: All – generally applicable; Prod – production / processing; Whse – warehousing; R&D – research; Chem – hazardous chemicals involved; HW – hazardous waste generated; SE – special equipment present; New – new construction or expansion in the last 5 years; Key – key regulated environmental entity; If – if any / as applicable.

## A.2 Module 1 Example: General Compliance & Permits (12 items)

| No. | Document required | Appl. | Legal basis | Provision requirement |
|---|---|---|---|---|
| 1.1 | Business license (USCC) | All | Company Law; Regulation on Registration of Market Entities | Copy with company seal |
| 1.2 | Property certificate / land lease | All | Civil Code; Land Administration Law | Copies; lease to include EHS liability clause |
| 1.3 | Site layout plan (workshops, warehouses, tanks, HW storage, outfalls, emergency facilities, fire lanes) | All | — | Latest CAD / PDF drawing |
| 1.4 | Process flow diagram & raw material inventory | Prod | — | State CAS No. and annual consumption |
| 1.5 | Organization chart & EHS appointments | All | Work Safety Law, Art. 24; Ecological and Environmental Code, General Part | Original appointment letters |

| No. | Document required | Appl. | Legal basis | Provision requirement |
|---|---|---|---|---|
| **1.6** | Proof of key regulated entity status (or self-assessment) | All | Measures for Administration of the List of Key Regulated Environmental Entities | Screenshot of the list or written confirmation by the authority |
| **1.7** | Permit & license inventory | All | — | Inventory + copies of certificates; check validity |
| **1.8** | ISO 14001 / ISO 45001 certificates | If | GB/T 24001-2016; GB/T 45001-2020 | Certificates + latest external audit report |
| **1.9** | Work safety standardization certificate & self-assessment | If | Basic Standard for Work Safety Standardisation of Enterprises (GB/T 33000-2016) | Certificate + latest self-assessment |
| **1.10** | Corporate EHS policies & internal audit reports | If | — | Last 2 years; must include verification evidence (re-test / photos / acceptance signature) |
| **1.11** | Sensitive receptors around the site | All | Ecological and Environmental Code, General Part | Marked on the plan + list |
| **1.12** | Enterprise size & industry classification basis | All | SME Classification Standard (MIIT Lianqiye [2011] No. 300); National Industry Classification (GB/T 4754-2017) | Self-assessment of size + industry code |

# Appendix B EHS On-Site Audit Checklist: Structure Overview and Module 1 Example

The complete on-site audit list follows the walkthrough route and contains 10 modules with 171 items. This appendix shows only the structure overview and Module 1 as an example; the complete list is tailored to the target's actual conditions after engagement. Module 1 (General Site Conditions & Housekeeping) is given in full below to illustrate how the questions are asked, the assessment basis used and the risk scale applied.

## B.1 Structure Overview

| No. | Module | Items | Main content |
|---|---|---|---|
| 1 | **General Site Conditions & Housekeeping** | 14 | Consistency of the layout with approvals, tenant factories, fire lanes, stormwater separation, impermeable surfaces, housekeeping and safety signs |
| 2 | **Fire Facilities & Fire Management** | 24 | Fire control room staffing, fire pumps and water supply, fire alarm and interlock, extinguishers and hydrants, fire compartments and evacuation, hot work control |
| 3 | **Electrical & Utilities** | 15 | Substations, cabling and cable trays, lightning and static protection, boilers and pressure vessels, compressors and refrigeration, confined spaces |
| 4 | **Machinery & Operational Safety** | 20 | Guards and emergency stops, presses and shears, lifting operations, maintenance and welding, work at height, lockout / tagout |
| 5 | **Chemicals & Warehousing** | 18 | Hazardous chemical store, tank farm, loading bays, gas cylinder store, laboratory, SDS and labelling, incompatible storage and over-storage |
| 6 | **Special Operations & Contractors** | 12 | Hot work / work-at-height / confined space permits, contractor qualifications and agreements, on-site supervision, site induction |
| 7 | **Environmental Facilities & Emissions** | 26 | Wastewater plant, final outfall and online monitoring, waste gas treatment, stacks, hazardous waste store, solid waste yard |
| 8 | **Occupational Health & PPE** | 16 | Noise and dust operations, toxic posts, heat posts, PPE provision and use, health surveillance, first aid points |
| 9 | **Emergency Management & Response** | 14 | Emergency command and alarm, evacuation routes and assembly points, emergency stores, drills and pull-outs, emergency pools |
| 10 | **Site Behaviours & Record Reliability** | 12 | Toolbox talks and shift handover, notice boards, gatehouse log, canteen and dormitory, cross-checking the authenticity of records |

Total 171 items. Conformity: Y compliant P partial N non-compliant NA not applicable. Risk rating: H high M medium L low. Applicability codes: All – all sites; Prod – production; Chem – hazardous chemicals; HW – hazardous waste; SE – special equipment; Key – key regulated environmental entity; New – new construction in the last 5 years; If – if any / as applicable.

## B.2 Module 1 Example: General Site Conditions & Housekeeping (14 items)

**Walkthrough route: main gate → main road → open storage yard → tank farm perimeter → around the site boundary.**

| No. | On-site audit focus | Appl. | Risk | Assessment basis |
|---|---|---|---|---|
| 1.1 | Does the site layout (workshops, warehouses, tank farm, hazardous waste room, office and living areas) match the EIA approval, discharge permit and fire acceptance drawings, with no unapproved construction or expansion? | All | H | Ecological and Environmental Code, General Part (formerly EIA Law Art. 31); Pollutant Discharge Permit Regulation Art. 13; Fire Protection Law Art. 13 |
| 1.2 | Are there tenant factories, leased workshops or outsourced processes on site? Are EHS and fire responsibilities defined and implemented? | If | H | Work Safety Law Art. 49; Fire Protection Law Art. 18 (shared buildings: the responsibilities of each party must be defined) |
| 1.3 | Are fire access roads and rescue areas unobstructed (width ≥4 m, clearance ≥4 m, no parked vehicles, stored goods or overhead obstructions) with adequate turning radius? | All | H | Fire Protection Law Art. 28; GB 55037-2022 Ch. 3 (fire lanes and rescue areas) |
| 1.4 | Is stormwater separated from wastewater? Do stormwater inlets show signs of sewage inflow, and are wastewater manholes clearly marked and leak-free? | All | H | Ecological and Environmental Code, Pollution Prevention Part; GB 50014-2021 (outdoor drainage design standard) |

| No. | On-site audit focus | Appl. | Risk | Assessment basis |
|---|---|---|---|---|
| 1.5 | Are production areas, tank farms, hazardous waste storage and loading areas hardened and impermeable, free of cracks, settlement or oil penetration? | All | H | Ecological and Environmental Code, Pollution Prevention Part (soil); GB 18597-2023 Art. 6.1; HJ 610-2016 |
| 1.6 | Is there non-seasonal yellowing, wilting or abnormal growth of vegetation, with underground pipelines, tanks or historical dumping nearby? | All | M | Ecological and Environmental Code, Pollution Prevention Part; HJ 25.1-2019 (technical guideline for soil investigation of development land) |
| 1.7 | Is housekeeping and 5S in place (marked walkways, designated material locations, no oil or water on floors, waste in bins, no leaks or spills)? | All | L | Work Safety Law Art. 4 (conditions for safe production); GB/T 24001-2016 Art. 8.1 |
| 1.8 | Are safety signs complete, correct and legible (prohibition, warning, mandatory, emergency), free of damage, fading, obstruction or mismatch with actual conditions? | All | M | Work Safety Law Art. 35; GB 2894-2008 |
| 1.9 | Are industrial pipes marked with medium identification color, name and flow direction, and are valves numbered and traceable to the P&ID? | Prod | L | GB 7231-2003; GB/T 24001-2016 Art. 8.1 |
| 1.10 | Is night-time lighting adequate on roads, loading areas and entrances, with no dark spots? | All | L | GB 50034-2013 (lighting design standard); GBZ 1-2010 Art. 5.2 |
| 1.11 | Are guardrails, covers or safety nets provided at roof edges, platforms, pits, stairs and floor openings, rigid and ≥1.2 m high? | All | H | Work Safety Law Art. 36; GB 55037-2022; GB 4053.3-2009 (fixed steel ladders and platforms) |
| 1.12 | Is smoking controlled (designated smoking area, no-smoking signs, no cigarette butts on site)? | All | M | Fire Protection Law Art. 22; internal company rules |
| 1.13 | Is pedestrian and vehicle separation implemented (walkways, speed limits, convex mirrors, loading area segregation, forklift speed control)? | All | M | Work Safety Law Art. 41; GB 4387-2008 (in-plant railway and road transport safety) |
| 1.14 | What is the distance and direction to sensitive receptors (residences, schools, water bodies, farmland)? Any odor, noise or dust complaints in the past 3 years? | All | M | Ecological and Environmental Code, Pollution Prevention Part; GB 3096-2008 (environmental quality standard for noise); GB 14554-1993 (emission standard for odor pollutants) |