

Heavy Equipment and the need for Full Material Disclosure

The global compliance environment is seeing an unprecedented increase in the number of regulations directly impacting the ability of Original Equipment Manufacturers (OEMs) to sell heavy equipment products around the world. Large markets, like the United States, European Union, and China continue to expand their chemical control laws [[See HEDSL Regulation List](#)], with smaller states and countries starting to introduce new restriction every year. Furthermore, the scope and focus of these regulatory challenges are expanding to include additional provisions beyond the traditional rules focused on chemical safety. These include tracking and reporting on critical raw materials, extended producer responsibility laws, and life cycle assessment reporting metrics. All these rules place additional compliance requirements, resource constraints, and complexity on manufacturers. Increased product complexity and deeper supply chains further complicate the industry's compliance efforts. To meet this challenge, additional resources and a more comprehensive approach will be required to mitigate the industry's compliance risk.

Various data formats and types of material declarations are currently in place across the industry. These non-harmonized approaches result in incremental data collection activities that increase the cost, resource requirements, and risk of non-compliance at every link in the supply chain. Additionally, approaches that rely on up-to-date statements of compliance inevitably lead to repetitive efforts as suppliers work to update obsolete data multiple times per-article, per-year, per-regulation. Compliance today is critically dependent on raw material composition disclosures in much greater detail than what is normally provided in Safety Data Sheets [SDS]. Full Material Disclosure [FMD], including regulated substances within these materials, is the harmonized approach needed to proactively manage compliance from material manufacturer to OEM.

Heavy Equipment manufacturers believe the most efficient way to comply with current and future legal requirements is through FMD. Incorporating this requirement into PPAP, or a similar part approval program, is a way to integrate this data collection process for newly requested components and materials. Making the submittal of an acceptable FMD an enforceable part of the approval process will enable the supply chain to provide data on historical and existing supplied parts that may pose a risk of noncompliance in final products. FMD, integrated with part approval, requires new composition submissions when a material or article changes, or during an update to a relevant regulation impacting the HEDSL. It is recommended that AEM members and their suppliers implement FMD into PPAP or other similar part approval processes.

An FMD ideally includes all materials, but requires, at a minimum, the reporting of all regulated substances in scope for the Heavy Equipment industry. AEM and their members developed a Heavy Equipment Declarable Substance List [HEDSL] to document every regulated substance of concern for the heavy equipment industry. To maintain a competitive market and confidential business information, companies may choose to not disclose the identity of a substance not currently on the HEDSL. However, to support industry competition and address the rapidly changing global regulatory environment, the HEDSL committee suggests that the nondisclosure limit should not exceed 10% at the material level.



AEM's Substance Compliance Council strongly encourages companies across supply chains to familiarize themselves with the purpose and scope of HEDSL and immediately start to utilize this list within their chemical compliance efforts.

Heavy Equipment Declarable Substance List Frequently Asked Questions

What is the HEDSL?

The HEDSL is a consolidated global list of chemicals and/or substances that are regulated, under review, or possess elevated risk characteristics for industry. Disclosure is required for chemicals listed on the HEDSL if they are present in a product, component, or part above specified thresholds. The HEDSL is intended for use by the off-road equipment manufacturing sector, and their supply chains, which include products intended for the construction, agriculture, mining, forestry, and utility sectors.

Why is the HEDSL important?

Over the past twenty years, politicians, non-governmental organizations, regulatory agencies, and the public continue to express growing concerns over the presence and use of certain chemicals in products, the household, and the workplace. In response to these concerns, the global regulatory landscape continues to grow more complex, with a proliferation of new chemical and substance regulations looking to address this growing political issue. In this business environment, successful companies need to understand which chemicals are in their products by adopting robust data collection and information management strategies.

In practice, businesses will need to scour their supply chains to obtain a full disclosure of materials for each part, component, and system they source for their product lines. On an industry level, this explosion of data requests will create an immense amount of confusion, work, and complexity across the supply chain. According to an unofficial industry survey, there are more than 3,000 different surveys propagating across the supply chain. As the number of regulations and requirements grow, this number will undoubtedly increase.

The HEDSL harmonizes and simplifies the industry's data collection efforts. Adopting a single list of known chemicals of concern, with agreed upon threshold limits and clearly communicated reasoning, will help educate the supply chain on the regulatory needs of their customers, as well as simplify the reporting requests they need to respond to. Ideally, fewer reporting standards will lessen the regulatory burden on the entire industry.

What system is the HEDSL modeled on?

The HEDSL is modelled after the Global Automotive Declarable Substance List (GADSL). GADSL is the automotive industry's list of chemicals of concern. This list has been developed and curated by the automotive industry for over 20 years. The purpose of the GADSL is to standardize the chemical reporting requirements for the automotive supply chain. As the off-road equipment industry and the automotive industry share similar supply chains, and have very similar chemical regulatory requirements, the goal of the HEDSL is to mirror the GADSL list as much as needed.

What information can be found on the HEDSL?

The HEDSL will contain information on the chemical name, CAS number, regulatory issue, effective date, reporting thresholds, date added, generic examples, and designations on the reasoning for their inclusion.

Does the HEDSL require the use of a specific software?

No, the HEDSL is intended to be tool agnostic. It is the intention of the HEDSL Committee to store the list on an excel spreadsheet, ensuring each company can use their own software systems when managing their chemical compliance work.

Who maintains the HEDSL?

The HEDSL list is administered, maintained, reviewed, and updated by the Association of Equipment Manufacturers (AEM) HEDSL Committee. This committee meets monthly to review new chemical regulations, determine and review chemicals of interest to the off-road equipment industry, and update the HEDSL as necessary.

How often will the HEDSL be updated?

The HEDSL committee is required to complete an annual review and update the HEDSL at least once per year, every March. The committee may choose to update the list more than once per year depending on the situation.

Where can I find the HEDSL?

The HEDSL is maintained by AEM and stored on their website. You can find the full list at the following address: <https://www.aem.org/safety-product-leadership/heavy-equipment-declarable-substance-list-heds/>