



REACH

Nidec Motor Corporation

REACH

What Does it Mean?



- **Registration (Chemical Suppliers/Importers, Nidec Confirms Uses)**
 - For all substances manufactured and/or imported greater than one ton per year, manufacturers or importers must prepare a registration dossier to be submitted to the European Chemical Agency
- **Evaluation (Agency Activity)**
 - Two Types of Evaluation
 - Dossier Evaluation – performed by the European Chemicals Agency
 - Substance Evaluation – performed by Member State Competent Authority
- **Authorization (if applicable, Agency Approves, Nidec Complies)**
 - Aim is to ensure that risks for substances of very high concern are authorized - ~1500 substances
 - Use of these substances will require adequate “controls”
 - Companies will be required to make efforts to find safer substitutes
- **And Restriction of Chemicals (if applicable, Nidec Complies)**
 - Proposal to restrict the manufacture, marketing, and use of the substance on its own, in a preparation or in an article

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What is it?



The system is based on the following rules:

- Chemicals will be screened for health and safety effects over an 11-year period
- The requirement from producers and importers of chemicals to prove that their substances are safe before they can be placed on the EU market
- New European Chemicals Agency will manage the registration (to be set up in Helsinki by June 2008)

The REACH regulation replaces 40 EU directives of chemical control regulations, placing it all into **one regulatory system...**

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Where Does It Apply?



- Applies if:
 - You manufacture in Europe
 - You import products into Europe
- REACH is “**substance legislation**” however, it defines obligations for **substance**, **preparation**, and **article producers**!

Key Terminology:

Substances, Preparations, Articles, & SVHC's



All for dreams

- **Substances:**

- “a chemical element and its compounds in the natural state or obtained by any manufacturing process, including any additive necessary to preserve its stability and any impurity deriving from the process used, but excluding any solvent which may be separated without affecting the stability of the substance or changing its composition” (Article 3.1 REACH)
 - Examples: ethanol, pure metals (Fe, Hg, Pb, etc.)

- **Preparations:**

- “a mixture or solution composed of two or more substances” (Article 3.2 REACH)
 - Examples: paint, lubricants, ink, alloys, steel, magnet wire, primary/secondary AI

- **Articles:**

- “an object which during production is given a special shape, surface, or design which determines its function to a greater degree than does its chemical composition” (Article 3.3. REACH)
 - Examples: Electrical and electronic equipment, a screw, a bolt, a motor

- **Substances of Very High Concern (SVHC):**

- Carcinogenic, Mutagenic, and toxic for Reproduction categories 1&2 (CMR substances),
- Persistent, Bioaccumulative and Toxic substance (PBT-substances), and
- very Persistent and very Bioaccumulative substance (vPvB-substances)
- Initial list of SVHC's will be made available by Jan. 1, 2009

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Who is Affected?



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Any company producing, importing, using or placing a **substance**, **preparation**, or **article** on the EU market will be responsible for ensuring that it is in compliance with REACH

Therefore, this Legislation Affects:

1. Chemical Suppliers
2. Chemical Importers
3. Downstream Users (DU)
 - Formulators
 - Article Producers
 - Industrial Users
 - Professional Users

REACH does NOT apply to quantities < 1 ton per year per mfg.

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How will it affect Nidec?



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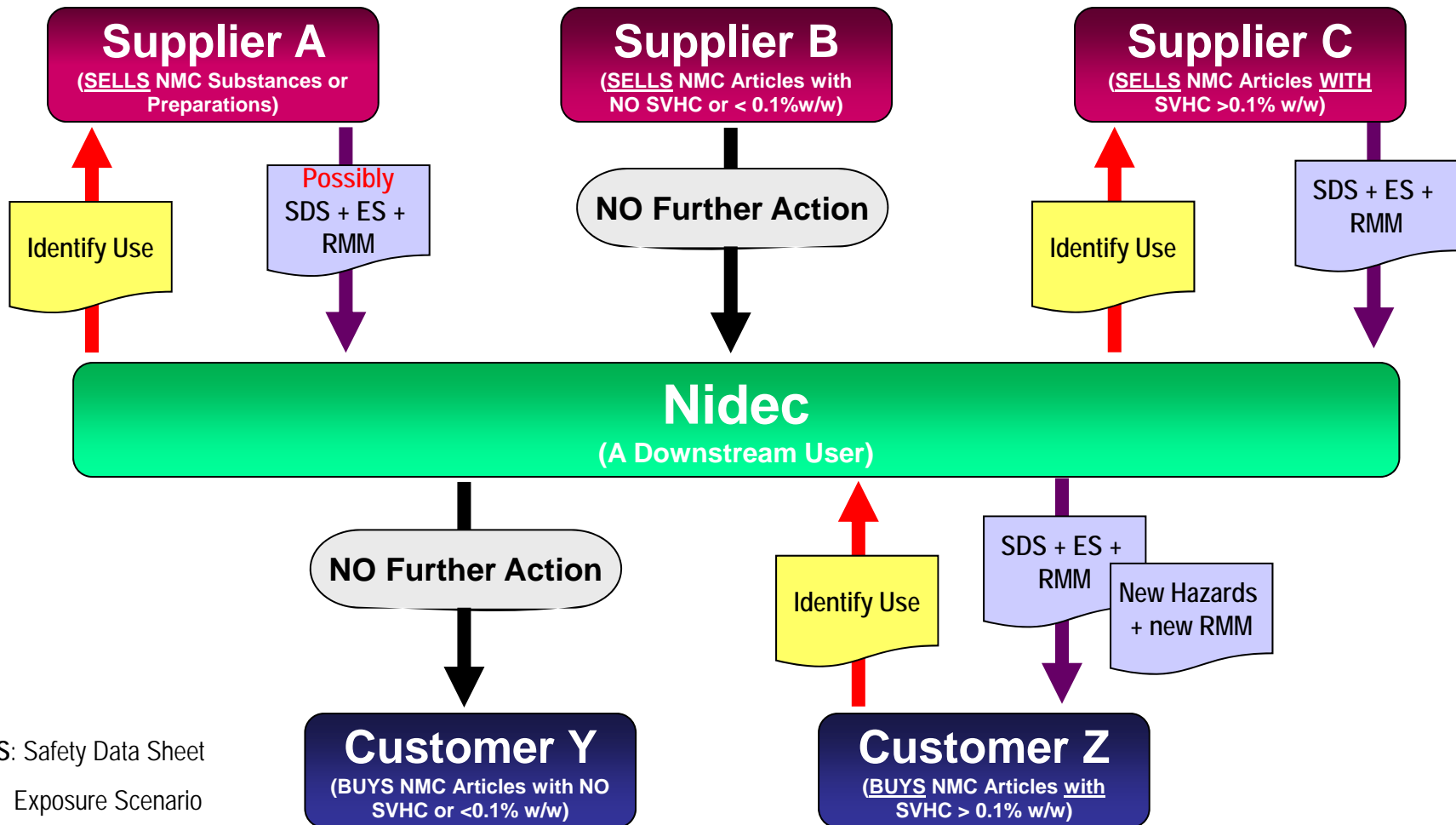
- *A Downstream user is any natural or legal entity (...), other than the manufacturer or the importer, who uses a **substance**, either on its own or in a **preparation**, in the course of industrial or professional activities*
- Majority of the REACH requirements apply directly to the manufacturers and importers of **substances**:
 - Supplying data on the properties of their chemicals
 - Developing safety assessments and providing Safety Data Sheets
 - Providing Risk Management Measures based on Exposure Scenarios

!!! A distributor or a consumer is not a downstream user !!!

!!! Downstream users have no registration duties !!!

Nidec Motor Corporation is considered a
“downstream user”

Downstream User Requirements



¹ SDS: Safety Data Sheet

² ES: Exposure Scenario

³ RMM: Risk Management Measures



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How will it affect Emerson?



- The legislation will not only impact our product but also our European manufacturing facilities
- Determination of chemicals used by Nidec facilities
 - Inventory list of chemicals (**substances** and **preparations**) used in Europe (MRO items may be especially difficult)
 - Classification of **substances** by use and quantity/year
 - Communication with suppliers
- Predicting where continuity of supply will be a problem
- Keeping track of all of the information and decisions (Intended use identification, SDS, ES, RMM's, etc.)
- Corporate has assigned a working group for REACH
 - Identifying REACH contacts at each EU mfg. facility
 - Initial training will be held in Europe for all REACH contacts
 - Follow-on training for Nidec divisions shipping product to Europe

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Industry Wide Risks/Technical Concerns



- **Knowing the Chemicals Used in our Products**
 - We have limited knowledge of the **substances** actually used in our products (generally applies to all companies like Nidec)
- **Continuity of Supply**
 - Chemicals may be removed from the market (supply disappears!)
 - Chemical manufacturers may cease to produce niche or low margin chemicals that we may be reliant (but don't know it!)
- **Restrictions on Use**
 - Unexpected restrictions on the use of a chemical could have a major impact on production and might cause costly design changes
- **Material Substitution**
 - A supplier decides to substitute a material without telling us and interferes with the product design
- **Substances of Very High Concern (SVHC) - get out of our products if possible!**
 - The EU wants to reduce/remove the use of these materials from the market

REACH Timeline



- End 2007 Final approval of REACH expected
- June 2008 European Chemicals Agency (ECHA) becomes operational, pre-registration phase starts
- 1 January 2009 ECHA will present the list of pre-registered **substances** (After this, Nidec may start receiving SDS's)
- 2008 - 2018 Withdrawal period for hazardous **substances**
- June 2018 Registration phase closes with **substances** produced in smaller quantities (1-10 tonnes)

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In a Nutshell, ...



- Aims to ensure safe use of chemicals throughout the supply chain in Europe:
 - Chemical Producers and Importers have the most responsibility and work – REACH is **substance** legislation!
 - Downstream Users (Nidec) will primarily have communication responsibilities and must keep documentation (in some cases, lots of it)
 - Represents the beginning of a process. REACH will take its final form during implementation over the next 10 years.
- **Impacts to Nidec** (as REACH stands today):
 - Could be a significant bureaucratic activity
 - Most of Nidec's "**Articles**" placed on the market will NOT be impacted
 - Identify all chemicals we use in our products and processes and confirm we are using them as the manufacturer intended (Must watch deadlines for this!)
 - Substances of very high concern (**SVHC**) will require high diligence
 - It is possible to protect "secret sauces" but will be more work to do so
 - In some cases, communicate specific information up and down the supply chain

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Closing remark...

The formal duties of Nidec as a “downstream user” will not start until the first **substances** have been registered (January 2009)...



...but since our suppliers might have to deal with the challenges and costs of registration, market impacts can be expected.