

International Chromium Development Association

REACH SEMINAR

27th June 2007, Brussels, Belgium



ICDA Mission Statement

- The ICDA is the dedicated authority of the Chromium industry promoting the value and sustainability of Chromium



ICDA Profile

- Established in Paris in 1984 with 8 founding Members
- 2007: 96 Members from 5 continents



ICDA Profile

- 56 Ordinary Members:
 - Mining
 - Alloys
 - Stainless Steel
 - Chrome Chemicals
 - Chrome Metal
 - Recycling



ICDA Profile

- 40 Associate and Affiliate Members
 - Trading
 - End-users
 - Service Providers



ICDA Profile

- A unique industry chain from mining of chromite ore to recycling of stainless steel dust
- Representation:
 - 93% of Chromite Ore
 - 82% of Ferrochromium
 - 82% of Chrome Chemicals
 - 60% of Chrome Metal
 - 65% of Stainless Steel



ICDA Focus

- A Forum for global industry
 - Successful annual events
- Market Intelligence
 - Collection of Production and Trade data
- Health, Safety & Environment
 - Promote sound industry performance and regulatory compliance



ICDA Focus

- Market Development via partnerships with sister organisations
 - Stainless Steel
 - Nickel
 - Molybdenum
 - and user industries



ICDA Structure

- Administered via Secretariat in Paris
 - 3 full-time staff
- Council of 18 Members
 - Represent geographical areas and industry sectors
- Four Standing Committees
 - Management
 - HSE
 - Market Development
 - Statistical



ICDA Structure

- Funding:
 - Annual Membership Fees (by Membership category)
 - Project-related levy based on tonnage



Chromium in figures (2006)

- 19.2 MT of Chromite Ore
- 6.5 MT of HC/Charge Ferrochromium
- 600,000 T of MC & LC Ferrochromium
- 850,000 T of Sodium Dichromate
- 40,000 T of Chromium Metal

(Preliminary ICDA Production figures)



Chromium in figures (2006)

- Europe produced: 380,000 T of HC FeCr
and imported: 1.85 MT of HC FeCr
+ 206,000 of Other FeCr
- Europe produced: 60,000 T of Sodium
Dichromate
and imported: *Not Available*
- Europe produced: 10,000 T Chromium Metal
and imported: 12,500 T (*2005 figure*)



HSE Committee

- Set up in 1990 with wide industry sector membership
- Health, Safety and Environment Guidelines (1992)
 - Now at 4th Revision
 - Also on ICDA website in Japanese, Mandarin and Russian



Chromium valency

- Chromium exists in three major valency states:
Trivalent, Metallic and Hexavalent
- Trivalent:
 - In nature Chromium almost exclusively in Trivalent oxidation state - most commonly in the mineral Chromite
 - Recognised as essential trace element in human/ animal diet to improve glucose metabolism



Chromium valency

- Other two valency states occur as result of manufacturing process:
- Zero valency for metallic Chromium and many Chromium alloys and Stainless Steel
 - Surface Chromium oxidised spontaneously to Trivalent state - “passive film”



Chromium valency

- Hexavalent Chromium occurs largely in chemical manufacturing - lesser extent in metallurgical processes
- Most significant occupational health effects related to Hexavalent Chromium compounds



Independent reviews

- Criteria Document for Hexavalent Chromium (1996)
 - Enabled EU to recommend Occupational Exposure Limits
 - Used by UK authority to review Chromium (VI) compounds under Existing Substances Regulations (predecessor of REACH)



Independent reviews

- Human Health Risk Assessment Report for Metallic and Trivalent Chromium (published November 2006)
- Environmental Risk Assessment Report for Metallic and Trivalent Chromium (for publication by end-2007)



Alloys

- REACH is substance-based regulation and somewhat unfriendly to Alloys
- In close contact with other metals and alloys associations
 - Eurometaux
 - EIMAG
 - Eurofer
 - Euroalliages
 - ENiA (nickel)

