HAZARDOUS TITANIUM DOES NOT BELONG IN LANDFILL

TITANIUM SWARF IS ONE FORM OF HAZARDOUS TITANIUM

ITA RECYCLING ORLANDO 2015

Robert G. Lee. Chair ITA Safety Committee, President, Accushape Inc.
DISCLAIMER

• THE INFORMATION PROVIDED IN THIS PRESENTATION IS NOT INTENDED TO REPLACE APPLICABLE LAWS AND REGULATIONS ALREADY IN EFFECT AND THAT ARE CURRENTLY BEING ENFORCED BY FEDERAL, STATE, AND OTHER RULEMAKING AUTHORITIES BUT SHOULD BE READ AS GUIDELINES TO MEMBERS OF THE INTERNATIONAL TITANIUM ASSOCIATION (ITA) FOR THE REASONABLE AND EFFECTIVE IMPLEMENTATION OF SAFETY STANDARDS ALREADY IN EXISTENCE. ITA HAS NOT ENDEavored TO PROMULGATE SAFETY STANDARDS, NOR DOES IT HAVE THE POWER TO ENFORCE AND ENSURE INDUSTRY WIDE COMPLIANCE WITH THE RECOMMENDATIONS CONTAINED HEREIN; THEREFORE, IN NO EVENT WILL ITA BE HELD LIABLE FOR ANY DAMAGES WHATSOEVER, INCLUDING BUT NOT LIMITED TO DAMAGES TO PERSON OR PROPERTY FROM ANY USE OF THE FOLLOWING ITA PRESENTATION OR SAFETY INFORMATION. THE FOLLOWING ITA PRESENTATION SHOULD NOT BE RELIED UPON FOR ANY PERSONAL OR SAFETY DECISIONS, AND THE USER IS ADVISED TO CONSULT WITH THE APPROPRIATE SAFETY PROFESSIONAL AND/OR GOVERNMENTAL BODY FOR SPECIFIC ADVICE REGARDING THE APPLICABILITY, IMPLEMENTATION, AND ENFORCEMENT OF ANY RECOMMENDATION CONTAINED HEREIN AS TO ANY PARTICULAR SITUATION.
YOUR RESPONSIBILITY

General duty on owners and operators of stationary sources producing, processing, handling or storing hazardous substances to identify hazards which may result from such substances using appropriate hazard assessment techniques to design and maintain a safe facility and to take such steps as are necessary to minimize the consequences.
TYPES OF TITANIUM SWARF

• (SOME ESTIMATE THE US QUANTITY TO BE MORE THAN 5 MILLION POUNDS PER YEAR)
  – FREQUENTLY WET
  – GRINDING AND SAW SWARF
  – SLUDGE FROM PROCESSING
  – MACHINING FINES
  – CONTAMINATED FINES FROM PROCESSING
LAND FILL HAZARDS

• Land fill options can create unintended consequences
  – Dumpster fires
  – Fires in land fill when placed or later
  – Transportation issues
  – Potential of moisture creating corrosion and or explosion hazards
COLLECTION AND STORAGE

- There are conflicts between NFPA, EPA and DEQ about accepted methods of storage.
- State and local regulations may differ.
- A “PHA” Process Hazard Analysis likely required.
TRANSPORT

• Requirements of 49 CFR part 172 must be addressed.
• Shipper is responsible
• Training and certification required
• Applies to all hazardous materials including waste
SAFE ALTERNATIVE ARISES FROM A DISASTER

• Primary processor Al Solutions experienced major fire and explosion in 2010
• After cause and corrective action analysis new plant opened 2013
• Automation reduced people exposure
• Containment of product and dust
• Economic and environmental benefit by recycling a hazardous form of titanium