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Case Study:

Overcoming Non-Compliance via an EMS

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- Manufacture and Market a variety of spa models.
- Facility operated as Hawkeye Manufacturing from 2001 to 2013 in south Richmond area.
- In 2006 Hawkeye was found to be deficient in various areas and was issued a Notice of Violation in August
  - Hazardous Wastes
  - Air VOC and Particulate Emissions
  - Operating without an Air Permit

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- In 2007 Hawkeye was issued a consent order aimed at getting back into compliance
  - Solid Waste compliance related to waste drums accumulated on site
  - Air emissions related to VOC's & Dust
- 2008 Hawkeye began work on putting an EMS into place required by the consent order.
- Environmental consultants were contracted to develop and implement EMS

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- Key Elements of EMS were developed:
  - Policy Statement
  - Roles & Responsibilities
  - Procedures & Training
  - Objectives & Targets
  - Pollution Prevention
  - Continuous Improvement of EMS

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- In April 2010 a third party audit was conducted to evaluate our system
- No major deficiencies were found and the report was copied to DEQ as required by the consent order.
- In August of 2010 the consent order was closed out by DEQ signifying that Hawkeye was now compliant with Virginia regulations

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- Key Progress steps in year 1:
  - Found a source for all the empty acetone and other drums that had accumulated on site.
  - Implemented an acetone recycling program allowing us to reuse a large portion of “dirty” acetone
  - Developed operating procedures designed to ensure that fiberglass application (where VOC’s & HAP’s are generated) is air permit compliant.
  - Worked with our suppliers to reduce waste items such as empty drums by taking them back when delivering full drums

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- Key Progress steps as system matured:
  - Utilized contract consultants to manage EMS
  - Changed waste haulers to ACE Recycling to reduce landfill footprint
  - Worked with Resin supplier to get lower styrene (HAP) levels in our resins used for fiberglass application
  - Conducted on-going weekly assessments to ensure we stayed on track.
  - Contacted other suppliers to recycle other waste streams such as plastic, drums, paper & cardboard

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- In 2012 Hawkeye applied for and was approved as a VEEP E3 member.
- In 2013 Hawkeye Manufacturing was acquired by Thermal Investments LLC and in 2014 began operations as Harnett Manufacturing.
- In 2014, Harnett will relocate the manufacturing operations to Chesterfield and manufacture spas as Barefoot Spas.

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- Key Milestones that have been a result of having an EMS in place have been:
  - Reducing acetone waste from 9 lbs per spa to less than .3 lbs per spa.
  - Reduction in waste generator status from SQG to CESQG in 2013
  - Increased pounds recycled per spa from 264 to 305 in 2013
  - Renewing our Air Permit and no longer being in the Title V program

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- Going Forward as Barefoot Spas:
  - Increased emphasis on waste reduction
    - 2014 objective to increase cardboard & paper to Sonoco Recycle Center
    - Baling & recycling shrink wrap waste
    - Separation of pallets from open dumpster loads to reduce voids and increase dumpster efficiencies
    - Grinding drill & trim waste to reuse as support material in spa base rather than landfilling.
    - Enclosing fiberglass spraying into environmentally controlled spray booths to better control VOC emissions in the fiberglass area.