Hemlock Semiconductor – Austin Peay State University Partnership

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Austin Peay State University

- Austin Peay State University, located in Clarksville, Tennessee, is a regional four-year public, masters level university.
- The fall 2010 enrollment of 10,273 students reflects Austin Peay record growth over the past years.
- Nearly 300 full-time faculty members at the university provide instruction in 56 majors and 63 concentrations on the main campus, the APSU Center at Fort Campbell, and on satellite campuses in Springfield and Dickson.
- The university employs approximately 800 employees and has a total economic impact on the region of more than $190 million annually.

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Hemlock Semiconductor

- Hemlock Semiconductor is a leading supplier of both semiconductor and solar grade polycrystalline silicon to the global market.
- Hemlock Semiconductor has a production facility in Hemlock, Michigan and has occupied this facility for 50 years.
- We are building a new production facility in Clarksville, TN and expect to have operations going in the fall of 2012.
- Our TN site will produce solar grade silicon only

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Clarksville Site Background

- 5 Continents and 60 sites were evaluated
- Hemlock Semiconductor was unique because we used internal people to do this site search
- Exercise brought us to 2 finalist sites, both in NA
- So, why did we choose Clarksville?

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Why Clarksville, TN?

- Local, State, and TVA Economic Development Professionalism
  - Listened to concerns and challenges. Responsive & provided solutions.
  - The Local, State and TVA economic development teams were ‘best in class!’

- Project Economics
  - Overall project economics v. competing sites
  - Competitive incentive package

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Why Clarksville, TN?

- TVA Certified Mega-Site
  - Large parcel of land already under ownership/control
  - Initial site assessments already completed as part of TVA certification
  - Linkage with industrial park infrastructure

- Community
  - Workforce availability – both TN and KY
  - Community ‘culture’ consistent with our company’s ‘culture’
  - Education and training infrastructure

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Hemlock Semiconductor Needs

- Phase 1 hiring = 500 full time jobs
- Approximately 180 are people who operate the site on a 24/7/365 basis.
- Approximately 65 maintenance personnel in the various trades – millwright, electrician, instrumentation technician, pipefitter/welder, rigger, power distribution, refrigeration

- Our first concern was operators, where would we find 180 people to run the site processes?

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APSU – HSC Partnership

- We turned to APSU for help. This was the beginning of the partnership.
- In Saginaw, Michigan, Delta College had developed a 2 year Associates Degree to train people to be chemical engineering technicians, i.e. those people qualified to operate chemical processes.
- It seemed a simple thing to ask APSU to develop a similar system.

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APSU Response

- Extremely positive and proactive externally
- Internally, some issues to resolve
- 4 Year University providing 2 Year Associates
  - This is what community colleges are for…
- Many at APSU from the President and Provost down through the science departments, Clarksville EDC and others, went to bat to convince the TBR this was the right way to go.

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TBR Response

- And, the TBR was willing to listen
- They not only listened but helped look for practical solutions
- The conclusion was a 2 Year degree was the appropriate way to support Hemlock Semiconductor
- So, both local and state level support was provided to develop the training program

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From this point…

- APSU personnel traveled to Delta College in Saginaw to learn what and how Delta College did what they do
- APSU put together a curriculum to train students to be chemical engineering technicians
- The Legislature approved an expenditure of over $6 million to construct a new building for this purpose.
- It was all there except…

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Equipment

- A chemical engineering technician student learns a lot of math and science but they also need practical experience on process equipment.
- Hemlock Semiconductor designed, built, help install, checked out and then donated $2 million in process equipment for this training.

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APSU – HSC Partnership

- This partnership worked and continues to work because when one party has a need, the other suggests solutions or provides resources to make that thing happen.
- Both parties provide experts in their fields but often have little knowledge of the other aspects. We work well together. Everything was fast tracked. From inception of the idea to people taking classes was about 2 years.

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Today

- This May, about 60 people graduated with an Associate of Chemical Engineering Technology.
- To my knowledge, all except one person got a job. HSC picked up most of them but some went to other companies, which was the original idea.
- 60 does not meet our initial needs but it certainly helps and the continued graduation will meet our needs in years to come as we, hopefully, continue to build and expand

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Thank You

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