Training Proposal for:
nanoPrecision Products, Inc.
Agreement Number: ET14-0158

Panel Meeting of: September 20, 2013
ETP Regional Office: North Hollywood  Analyst: N. Weingart

PROJECT PROFILE

<table>
<thead>
<tr>
<th>Contract Attributes:</th>
<th>Retrainees</th>
<th>SB &lt;100</th>
<th>Priority Rate</th>
<th>Job Creation Initiative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry Sector(s):</td>
<td>Manufacturing</td>
<td>Nanotechnology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Priority Industry:</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Counties Served:</td>
<td>Los Angeles, Ventura</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repeat Contractor:</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Union(s):</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Employees in:</td>
<td>CA: 40</td>
<td>U.S.: 40</td>
<td>Worldwide: 40</td>
<td></td>
</tr>
<tr>
<td>Turnover Rate:</td>
<td>0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managers/Supervisors:</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

FUNDING DETAIL

Program Costs  | $208,000

[Substantial Contribution]  | $0
[High Earner Reduction]     | $0

Total ETP Funding = $208,000

In-Kind Contribution: 100% of Total ETP Funding Required $385,920
## TRAINING PLAN TABLE

<table>
<thead>
<tr>
<th>Job No.</th>
<th>Job Description</th>
<th>Type of Training</th>
<th>Estimated No. of Trainees</th>
<th>Range of Hours</th>
<th>Average Cost per Trainee</th>
<th>Post-Retention Wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Retraineen SB &lt;100 Priority Rate</td>
<td>Computer Skills, Continuous Improvement, Manufacturing Skills, Business Skills, PL-Manufacturing</td>
<td>40</td>
<td>8-200</td>
<td>0</td>
<td>$4,160</td>
</tr>
<tr>
<td>2</td>
<td>Retraineen Job Creation Initiative SB &lt;100 Priority Rate</td>
<td>Computer Skills, Continuous Improvement, Manufacturing Skills, Business Skills, PL-Manufacturing</td>
<td>10</td>
<td>8-200</td>
<td>0</td>
<td>$4,160</td>
</tr>
</tbody>
</table>

### Minimum Wage by County:
- $16.00 per hour for Los Angeles County, and $14.69 per hour for Ventura County.

### Health Benefits:
- Yes ☑️  No ☐  This is employer share of cost for healthcare premiums – medical, dental, vision.

### Used to meet the Post-Retention Wage?:
- Yes ☑️  No ☐  Maybe ☐

## Wage Range by Occupation

<table>
<thead>
<tr>
<th>Occupation Titles</th>
<th>Wage Range</th>
<th>Estimated # of Trainees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineer I-III (R&amp;D)</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Engineer IV-V (R&amp;D)</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Engineer (Manufacturing)</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Technician (Production Staff)</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Account Clerk</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Manager I (Engineering, Mfg., Admin)</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Manager II (Engineering, Mfg., Admin)</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Executive Manager (VP)</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Executive Manager (VP)</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Owner</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Machinist (Tool &amp; Die Maker)</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Manufacturing Support</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Administrative Support</td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>
INTRODUCTION

nanoPrecision Products, Inc. (nPP) (www.nanoprecision.com) is a privately held, high-technology, precision manufacturing company with 40 employees and two locations in California: the product development center in Camarillo; and the prototyping and manufacturing center in El Segundo. The Company makes ultra-high, precision products for the medical, telecommunications, and military/aerospace industries. Since its incorporation in 2002, nPP has been conducting critical research in the core technologies for large volume, high speed, and nano-scale tolerance manufacturing.

This will be nPP’s second ETP Agreement. The Company’s first ETP Agreement provided Computer and Manufacturing Skills to support its early manufacturing efforts by standardizing processes, teaching Teamcenter software to manage product life cycle, CAD/CAM software to design products, and fundamentals of high tech machinery and product assembly.

nPP is continuing to move from its initial Research & Development (R&D) and early production phase into the manufacturing and product qualification stages. It has added 11,000 sq. ft. to the El Segundo facility, and is installing high speed, high-precision mechanical presses, electro-chemical surface treatment machines, and automated assembly equipment. Additionally, nPP is expanding its tool room to produce and repair production tooling. nPP is also upgrading its NX Unigraphics 7.5 design software to the 8.5 version and due to customer demand, nPP must now obtain ISO 9001 and AS9100 certifications, which require an Enterprise Resource Planning (ERP) system.

Retrainee-Job Creation

nPP has committed to hiring 10 new employees (Job Number 2). Trainees must be hired within the three-month period prior to Panel approval or during the term of contract. Newly hired employees will be reimbursed at a higher rate, and will be subject to a lower post-retention wage.

nPP meets out-of-state competition standards as a NAICS-designated manufacturer and is a Panel priority industry. (Title 22, California Code of Regulations, Section 4416 (i).)

PROJECT DETAILS

Training Plan

All employees in R&D, manufacturing, and support functions will need training to strengthen both existing and upgraded skills in the following:

Business Skills (5%) - Training will be offered to Accounting Clerks and Administrative Support Staff to implement new business practices generated by the ERP software, improve project management, upgrade accounting skills, and sharpen Microsoft Office computer capabilities used for several office functions.

Computer Skills (40%) - Training will be given to all occupations to effectively implement and utilize the ERP software; manage the database; and use product design and measurement software.
Continuous Improvement (40%) - Training will be given to all occupations to obtain its ISO 9001 and AS9100 certifications.

Manufacturing Skills (8%) – Training will be given to Technicians, Machinists, and Engineers to operate and maintain equipment and machinery, design machine tools, learn new assembly techniques, handle hazardous waste, and become certified in forklift operations.

Productive Lab (Manufacturing Skills) (7%) – Training will be provided to Technicians, Machinists, and Engineers working directly on equipment that is too costly to take out of production, making products that are too costly to discard. nPP's processes are specific and precise, requiring very rigid tolerances. Trainees will work one-on-one with expert trainers that oversee each step of the work and review and test the outcome for conformance to specifications, verifying accuracy and precision.

Productive Lab (PL) trainees may produce goods for profit as part of the training, in the courses identified under the Curriculum, with no more than 10 trainees per instructor. The instructor must be dedicated to training delivery during all hours of training.

➢ Training Infrastructure

Classes will be delivered by in-house instructors and outside vendors. Project administration will be overseen by the Human Resources Manager assisted by the training staff.

Impact/Outcome

nPP will obtain its company-wide ISO 9001 and AS9100 certifications, and forklift certifications for designated individuals.

Commitment to Training

nPP has a training budget of approximately $180,000 per year for both facilities, and delivers courses in regulatory compliance, computer software skills, and technical job skills. nPP also trains in company Standards, Processes and Procedures. Training, both job-specific and company-wide, is mandatory for all employees.

ETP funding will allow nPP to grow, meet customer and industry standards with quality products, and ensure that all staff is well versed in the latest technology. Training will provide workers an in-depth understanding of nPP's processes, procedures and manufacturing techniques.

Safety training is, and will continue to be, provided in accordance with all pertinent requirements under state and federal law.

Training Hours Limitation

Small business retraining is normally capped at 60 hours per trainee; however, nPP is requesting a modification of the cap to deliver up to 200 hours of training per person. ISO9000, AS9100, and ERP training alone will total approximately 50 to 80 hours per trainee. Trainees require additional technical training to support nPP's aforementioned upgrades.

RECOMMENDATION

Staff recommends approval of this proposal and the modification to the training hours cap.
PRIOR PROJECTS

The following table summarizes performance by nPP under an ETP Agreement that was completed within the last five years:

<table>
<thead>
<tr>
<th>Agreement No.</th>
<th>Location (City)</th>
<th>Term</th>
<th>Approved Amount</th>
<th>Payment Earned $</th>
<th>%</th>
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</thead>
<tbody>
<tr>
<td>ET13-0142</td>
<td>El Segundo &amp; Camarillo</td>
<td>09/06/12 – 09/05/13</td>
<td>$49,920</td>
<td>$49,920</td>
<td>(100%)</td>
</tr>
</tbody>
</table>

DEVELOPMENT SERVICES

N/A

ADMINISTRATIVE SERVICES

N/A

TRAINING VENDORS

To Be Determined
Exhibit B: Menu Curriculum

Class/Lab Hours
8 - 200 Trainees may receive any of the following:

BUSINESS SKILLS
- Project Management
- Accounting Practices
- ERP Process Implementation & Change
- nPP Standards

COMPUTER SKILLS
- ERP System Implementation
- NX Unigraphics 8.5 CAD/CAM/CAE
- Teamcenter Express (Database Management)
- Quindos (Metrology Measurement)
- MatLab (Mathematical Analysis Tool)
- Geomagic (Geometric Analysis Tool)
- Simufact (Metal Forming Simulation Tool)
- QuickBooks
- MS Office (Word, Excel, PowerPoint, Project, Publisher)

CONTINUOUS IMPROVEMENT
- ISO 9001-2008
- AS9100
- Process Improvement Teams
- Leadership
- Coaching & Mentoring

MANUFACTURING SKILLS
- Equipment Operation & Maintenance
- Computer Numerical Control (CNC) Machining
- Coordinate Measuring Machine (CMM)
- Talysurf (Surface Roughness Measurement)
- Zygo 7300 (Surface Measurement)
- Fiber Optic Cable Assembly
- Forklift Operation
- Hazardous Waste
- Tool Calibration

Productive Lab Hours
8 - 200

MANUFACTURING SKILLS
- Equipment Operation & Maintenance
- Computer Numerical Control (CNC) Machining
- Grinding
- Inspection Tools & Methodology

Note: Reimbursement for retraining is capped at 200 total hours per trainee, regardless of method of delivery.