



### SPECIALIZED EXPERIENCE

- ❑ Remote Water and Sewer Facilities
- ❑ Municipal Facilities
- ❑ Fuel Systems
- ❑ Educational Facilities
- ❑ Aircraft Facilities
- ❑ Heating and Ventilation Systems
- ❑ Process Piping and Plumbing systems
- ❑ Energy Conservation
- ❑ Fire Protection

### EDUCATION

- ❑ BSME, 1970, California State Polytechnic College, San Luis Obispo
- ❑ Continuing Education in HVAC, Corrosion Control, Arctic Engineering

### PROFESSIONAL LICENSE

- ❑ Registered Professional Engineer, State of Alaska (ME-5641)

### PROFESSIONAL QUALIFICATIONS

**Kevin L. Hansen, P.E., EDC, Inc.** Kevin Hansen is a principal of EDC, Inc., and the engineer of record for the mechanical projects designed by the firm. He has been with the company since 1994 and has over 26 years experience in design of mechanical systems for federal, state, municipal, commercial, industrial and educational facilities. He has worked on projects throughout the State of Alaska and has extensive experience in remote communities and locations.

Kevin's work history includes projects for numerous governmental agencies including the Corps of Engineers, Village Safe Water, Alaska Native Tribal Health Consortium (ANTHC), Alaska Industrial Development and Export Authority (AIDEA), the State of Alaska Department of Transportation, the Municipality of Anchorage and many other city and local municipalities. He has designed several complex, multi-million dollar facilities including aircraft hangars for Elmendorf Air Force Base, and the Red Dog Mine Port Site Material Handling Expansion project.

Kevin's involvement in municipal works projects includes mechanical systems design and construction review of water and wastewater plants for various Alaskan communities. These projects range from Village Safe Water facilities with water supply, laundry, showers, and sewage treatment for remote villages to major expansions of larger communities' wastewater facilities. Kevin has provided design and construction review of water supply systems for private water utilities in Alaska which included diesel-driven fire service pumps as well as normal service pressure pumps.

Kevin's rural water and wastewater experience includes sanitation facilities design for numerous villages, where he designed freeze protection systems for new water distribution and wastewater collection systems. He has participated in feasibility studies for communities, where he evaluated existing facilities and made recommendations for improvements. Kevin's experience also includes mechanical design support for both new water treatment plant construction and improvements existing facilities. He also designed public laundry facilities for more than ten rural communities. His designs for many of them incorporated dryer exhaust heat recovery.

Kevin has designed fuel systems, both individually and as an integral part of many of his projects. He has been involved in upgrades for rural bulk fuel systems for the Alaska Energy Authority at a number of villages, including Chuathbaluk, Crooked Creek, Hoonah, Port Graham, White Mountain, Red Devil, and Larsen Bay. Those projects involved site investigations of existing bulk fuel storage, identifying potential sites for new consolidated fuel storage facilities, and development of preliminary design for funding

## **AFFILIATIONS**

- ❑ American Society of Mechanical Engineers
- ❑ American Society of Heating, Refrigeration, and Air Conditioning Engineers
- ❑ National Society of Professional Engineers

## **REFERENCES**

- ❑ Mark Palmatier, Cornerstone Construction, (907) 753-2075
- ❑ Jon Hermon, P.E., CRW Engineering Group, (907) 562-3252
- ❑ Greg Magee, P.E., MWH, (907) 248-8883

allocation. For final design, he provided Fire Code analysis, recommendations for reuse of tankage, and piping design and layout for fuel delivery, transfer, and dispensing functions. Kevin designed piping system modifications at Texaco's Anchorage Port Tank Farm to enable the transfer of petroleum products between tanks and loading stations. The majority of his facility designs have used fuel oil as an energy source.

Kevin has comprehensive experience related to commercial and institutional projects. He has designed HVAC and plumbing systems for schools, dormitories, senior citizens activity centers, and apartment buildings. His school mechanical systems designs range from Barrow to Anchorage, and he has been involved in Value Engineering and review for school projects in Southeast Alaska. He has performed energy conservation studies for schools located in interior Alaska, identifying and evaluating possible energy conservation measures. These studies have been the basis for expansion and improvement with little or no increase in the energy budget. Kevin has completed energy audits for the water and wastewater facilities at Homer, and for Alaska Railroad Corporation's Anchorage Roundhouse. The audits investigated building envelope, process, HVAC, and electrical system modification alternatives.

Kevin has a broad base of technical knowledge. During his career he has adopted technologies to develop tools for analysis of mechanical systems while maintaining and expanding on solid background of fundamental knowledge in the fields of hydraulics, heat transfer, and other areas. While attending college, he worked part time in the plumbing and heating trades, where he gathered valuable practical experience for his mechanical engineering career.

Prior to joining EDC, Inc., Kevin was Chief Mechanical Engineer for CH2M Hill's Anchorage Office, where he designed and managed a wide variety of mechanical systems projects.

Kevin began his engineering career as a civilian employee with the Civil Engineering Squadron at Elmendorf AFB. Where he was involved in projects such as steam distribution system expansions, remodel of dining, office, and housing facilities, a new hobby and craft center, and industrial facilities improvements. He was also responsible for review of all projects for corrosion control, and performed corrosion control surveys of Air Force Facilities.