

Pinnacle Engineering Takes On Many New Changes

CEO's Corner by Jim Holland P.E./CEO

Pinnacle Engineering has continued our record of strong and steady growth since the company was founded in 1991. We continue to grow not because of flashy advertising or marketing, but due to the steady repeat business and word of mouth referrals generated by our loyal long term friends and clientele. For that long term support, I offer a heart-felt thank you.

Our growth continues to come from our desire to be a full service provider of solutions to all of the environmental and site related problems our clients face. Over the past year, Pinnacle has grown to approximately 25 professional employees with offices in Maple Grove and Rochester Minnesota. Our core business areas consist of environmental permitting and compliance services for industrial manufacturing clientele, and property transfer and property development services for land developer, municipal, private party, institutional, industrial and manufacturing clientele.

Shining examples of our continued commitment to servicing our clients needs include the addition of key personnel within our industrial services group to deal with complex air emissions permitting and modeling problems. Many of our industrial and manufacturing clients are burdened with complying with increasingly strict air quality regulations. Pinnacle continues to attract some of the top talent available with this type of expertise.

Another example is the addition of geo-technical and wetlands services to our environmental services group. As we have grown, we have discovered that many of our clientele want to have all of their environmental and geo-technical

issues addressed under one roof. We have added key personnel to allow us to take on very large and complex land development and/or land clean-up related projects without having to go outside for expertise.

One of Pinnacle's key areas for growth over the coming years is our Facilities and Process Engineering group. This group is now lead by Larry Sibik, P.E., a long term partner in Pinnacle. The need to add these types of services has become apparent as we have become more intricately involved with many of our clients facilities and manufacturing process operations. We have added engineering personnel with long term facilities and manufacturing process related experience to assist our clientele in solving these types of critical and complex problems.

From where I sit, the future of Pinnacle looks much like the past. We will continue to strive to meet our clients needs, and expand our business through the addition of key personnel that have the potential to further assist our clients. As our staff continue to learn how to work together, it seems that our only limitations as a business are those that we impose upon ourselves.

Thank you for your continued encouragement and support. Please feel free to contact me directly if I or Pinnacle can assist you in any issue you may be facing.

New Pinnacle Offices Once Site of Auto Salvage Yard

Pinnacle will soon be moving to our new Corporate headquarters on the former Hans Foreign Auto salvage yard site in Osseo, Minnesota. Work conducted by Pinnacle was instrumental in the successful redevelopment of this property, which had been utilized as an automobile salvage yard for over 30 years. Pinnacle conducted Phase I and II Environmental Site Assessments that indicated that the shallow soils at the property had been impacted by petroleum contaminants and heavy metals. A comprehensive site investigation further determined that the groundwater at the site had been impacted by diesel range petroleum contaminants and heavy metals.



Construction of new complex that will house Pinnacle offices..

Pinnacle entered the site into the MPCA Voluntary Investigation and Cleanup (VIC) program and prepared a Response Action Plan that involved the removal and disposal of approximately 6,000 cubic yards of contaminated soil. Pinnacle assisted the City of Osseo in obtaining a grant from the Department of Trade and Economic Development for the investigation and cleanup of the property. The grant, which totaled over two million dollars, covered project costs including site acquisition, soil cleanup activities, and building demolition. The

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Winona Retail Center Development Underway

The development of a new 32-acre retail center is underway on one of the last remaining large commercial properties in Winona. Work by Pinnacle staff has been instrumental in getting this large development off the ground. The development project has had many challenges, including the former use of the property for fill by a local foundry company, the presence of over 12 acres of wetlands on the site, and the presence of soft soils beneath the site.



Sediment samples are collected from the bottom of Lake Winona.

The retail development is located in southeastern Winona adjacent to the Riverbend Industrial Park. Pinnacle's client filled approximately 11 acres of the site with foundry sand up to a thickness of five to six feet. The MPCA charged the client with a violation of solid waste disposal rules and mandated that the "landfill" at the site be closed in accordance with solid waste rules. At the same time, the client was attempting to sell the property to Menards, who wanted to develop the property for retail use. In

order to satisfy all the parties involved and minimize potential impact to the underlying groundwater, Pinnacle conducted a detailed site investigation and risk assessment at the site and developed a Response Action Plan involving the construction of the retail development over the top of the former foundry sand landfill. The MPCA Voluntary Investigation and Cleanup (VIC) and Solid Waste programs accepted the development plan as an alternative for landfill closure.

The development site is situated in a topographically low area, so it was estimated that over 200,000 cubic yards of sand would need to be brought in to bring the site up to grade to match the surrounding developed properties. In 1998, the City of Winona acquired a permit to dredge Lake Winona, using the dredge sand to fill their adjacent Riverbend Industrial Park. In 2001, Pinnacle successfully obtained a modified dredge permit for the City to remove additional dredge sand for use on the development property. To obtain this permit, Pinnacle had to collect sediment samples from the bottom of Lake Winona to ensure that no contaminants were introduced to the site. In addition, Pinnacle completed an Environmental Assessment Worksheet, in accordance with Environmental Quality Board rules, to ensure that all environmental aspects of the project were assessed. The EAW concluded that no adverse environmental impacts would occur from the additional dredging and placement of dredge spoils on the development site.

Pinnacle delineated over 12 acres of wetland that would need to be filled during the development activities. Pinnacle prepared the necessary permits for the Army Corps of Engineers and the Minnesota Wetland Conservation Act for submittal to federal, state and local regulators. Due to Minnesota rules, it would be necessary to create approximately 25 acres of new wetland area to replace the wetlands being filled at the development site. Pinnacle staff developed a wetland replacement plan on 25 acres of farmed land near Kellogg, Minnesota and assisted Menards in securing a conservation easement for the newly created wetlands. The wetland filling and replacement plans were approved by the Corps of Engineers and the local government unit following extensive negotiations with State and local regulators.

The development site, which is situated within the historical floodplain of the Mississippi River, is underlain by up to 20 feet of soft, clayey soils with relatively high organic content. Pinnacle conducted a geotechnical investigation of the site and recommended that the building pad areas be surcharged with up to 10 feet of fill in order to preload the soft soils prior to construction. Pinnacle's engineers placed settlement plates at the site and are currently evaluating the rate of settlement due to the surcharge.



Dredge sand from Lake Winona is brought onto the property.

Pinnacle's effort on the Winona Retail Center development project has involved all aspects of our environmental engineering services, including wetland delineation and mitigation, EAW preparation and environmental permitting, soil and groundwater investigation and remediation, and geotechnical investigation. This complex project required coordination with numerous regulatory agencies, including local, state and the federal government, and highlights Pinnacle's emphasis on tight project management, which resulted in the successful completion of the project.

The Pinnacle Project Team included:

Mike Hultgren, P.G. - Project Manager
 Scott Thelen, Matt Bartus – Wetland Services
 Eric Simonson – Field and Geotechnical Services
 Eric Hansen, P.E. – Geotechnical Services
 Jim Holland, P.E. – Principal-In-Charge



Minnesota's New Air Pollution Modeling Requirements

On June 9, 2001, The Minnesota Pollution Control Agency (MPCA) finalized the new modeling requirements for Title V facilities. The MPCA proclaims that the new Title V modeling policy is "more focused and streamlined to protect ambient standards and gather data for future PSD/SIP reviews." The basis for the new Title V modeling policy was to gather information from sources most likely to exceed ambient standards and from other sources for future PSD/SIP considerations.

The new modeling policy requires that all Title V sources who exceed allowable emissions of 100 tons per year of nitrogen oxides (NO_x), sulfur oxides (SO_x), and particulate matter less than 10 microns (PM₁₀), must submit modeling information; the extent of which depends on whether the facility is categorized as a "large" or "small" Title V facility.

For the purpose of Minnesota modeling requirements, a large Title V source is defined as a facility that has:

- Actual PM₁₀ emissions of 100 tons per year or more
- Actual SO₂ emissions of 250 tons per year or more
- Actual NO_x emissions of 1000 tons per year or more

A small Title V source is defined as a facility that has:

- Allowable emissions of PM₁₀, SO₂ or NO_x, of 100 tons per year, AND actual emissions of PM₁₀, SO₂ and NO_x that are less than the large facility thresholds listed above.
- Taconite facilities with outdated or missing information

The modeling submittal for large Title V sources will require the following:

- Modeling protocol including initial building profile (BPIP) input/output files.
- Facility site plans, maps and photographs
- Modeling summary report including final BPIP input/output files

- Input, output, and plot files
- Meteorological data

The modeling submittal for small Title V sources will require the following:

- BPIP input/output files
- Source and receptor input files

The MPCA is currently developing forms for submittal of the BPIP input/output files and source and receptor input files required for small Title V source submittal. However, the standard EPA format will also be accepted. Large sources will be required to submit the required information in the standard EPA format.

Insignificant facility sources will require careful consideration when evaluating whether or not they need to be included in the model. According to the MPCA, insignificant activities can have a significant impact on ground level concentrations and those sources with emission rates between 0.1 and 2.28 pounds per hour will have to be included in the model. However, those sources can be consolidated into a single area source and represented by the smallest rectangular area enclosing these sources.

In addition to Modeling for NO_x, SO₂ and PM₁₀, the agency is working on ways to screen facilities that may require full air toxic modeling. For more information regarding the Minnesota modeling requirements, call Pinnacle at (763) 391-1735.

Pinnacle Has Presence At "Ground Zero" in New York City

Anthrax Sampling and Air Quality Testing Are Key Areas of Expertise

Pinnacle's engineering team has recently completed a month-long project involving industrial hygiene testing in the City of New York. The project, consisting of ANTHRAX sampling and AIR QUALITY testing, has centered around the mail rooms of many prominent office buildings, as well as major media network studios in the New York area.

The Air quality testing involves anthrax sampling, asbestos testing, silica testing, and fungal/mold testing in the buildings surrounding the twin towers site. The tremendous shock wave created when the towers were hit engaged sprinkler systems in many buildings, resulting in mold growth within the dry wall. Air intakes in the surrounding buildings were contaminated with asbestos from the destruction of the twin towers.

NESHAP Update

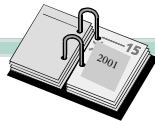
During 2001, the US EPA has issued proposed and finalized regulations, including updated Maximum Available Control Standards (MACT) known as National Emission Standards for Hazardous Air Pollutants (NESHAP) for a variety of industries. The industries affected by these regulations include:

- **Boat Manufacturing,**
- **Wet-Formed Fiberglass Mat Production,**
- **Pharmaceuticals Production,**
- **Large Municipal Waste Combustors,**
- **Nutritional Yeast Manufacturing,**
- **Commercial and Industrial Solid Waste Incineration Units,**
- **Vegetable Oil Production,**
- **Steam Generating Units, and**
- **Ferroalloys Production.**

MACT reflects the maximum degree of reduction in emissions of Hazardous Air Pollutants (HAP) that is achievable taking into consideration the cost of achieving the emissions reductions, any non-air-quality health and environmental impacts, and energy requirements. Watch for details on each new NESHAP in Pinnacle's 1st Quarter, 2002 Prospective.

To find out if the NESHAP MACT Standards will impact your operations, call a Pinnacle Engineer at (763) 391-1735 in Maple Grove or (507) 280-5966 in Rochester, MN.

Regulatory Calendar



- Dec. 15th**—Hazardous Waste Annual Report (Hennepin County Residents)
- Dec. 15th**—Hazardous Waste License Application (Hennepin County Residents)
- Dec. 31st**—Air Emissions Equipment Inventory Report
- Dec. 31st**—Hazardous Waste Training
- Dec. 31st**—MCES Industrial Wastewater Sampling (All Permit Holders)
- Jan. 31st**—MCES Industrial Wastewater Report (Metro Area)
- Jan. 31st**—Hazardous Waste Annual Report (Metro Area: County Specific)
- Jan. 31st**—Hazardous Waste License Application (Metro Area: County Specific)
- Jan. 31st**—Air Emissions Deviation Report (State & Federal Permit Holders)
- Jan. 31st**—Air Emissions Annual Certification (State & Federal Permit Holders)
- February 1st**—1998 Emission Inventory Corrections (All Air Permit Holders)
- February 28th**—Tier II Turnaround Report (MN ERC & Fire Department)

December 22, 2001—Wisconsin PECFA tank investigation and cleanup fund maximum reimbursement (Site Cap) reduced from \$1,000,000 to \$190,000 per occurrence for projects started after Dec. 22, 2001.

June 30, 2005—Minnesota Petrofund Sunset. Final date to perform reimbursable investigation or cleanup of petroleum storage tanks in Minnesota.

Pinnacle Projects in Progress ...

INDUSTRIAL

- **Concrete Manufacturer, Wells, MN**—designing an acid etch room and waste water treatment
- **Industrial Plating Operation, Maple Grove, MN**—shop clean up
- **Fiberglass Operation, Woodbury, MN**—developing an air emissions factor

ENVIRONMENTAL

- **North Central Business District Redevelopment, Anoka, MN**—PCE soil cleanup
- **Sawmill Run Redevelopment, Minneapolis, MN**—soil vapor survey
- **Industrial Facility, Prentice, WI**—PCE soil/groundwater investigation and cleanup
- **Downtown Osseo Redevelopment, Osseo, MN**—grant application for investigation / cleanup

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existing site buildings were demolished and over 8,000 cubic yards of soil, containing petroleum contaminants and various debris, were successfully remediated during the Spring of 2001, making way for construction of the new corporate offices of Cornelius and the Bell Tower office building. Pinnacle's geotechnical services group conducted a geotechnical investigation of the soils at the site and performed soils and building materials testing during construction of the new buildings.

The Pinnacle Project Team included:

Mike Hultgren, P.G. - Project Manager
Janelle Amendola, E.I.T. - Site Assessments, DTED Grant
Eric Simonson - Demolition/Cleanup Oversight
Eric Hansen, P.E. - Geotechnical Services
Jim Holland, P.E. - Principal-In-Charge

Training Keeps Pinnacle Staff Informed of Industry Trends



INDUSTRIAL/ENGINEERING

8-Hour Refresher course - Pinnacle engineering staff

ENVIRONMENTAL

Janelle Amendola: EPA Brownfields 2001 Conference, Chicago, IL
Mike Hultgren: AIPG/AEG Annual Conference, St. Louis, MO
Eric Simonson: AIH Hydrogeological Sampling Workshop, Minneapolis, MN
Scott Thelen: Watershed Management Conference, St. Cloud, MN



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