Appendix G Qualifications

Company Information

Barr provides a wide range of engineering and scientific consulting services. Barr traces its origins to the early 1900s, and was incorporated as an employee-owned firm in 1966. Our company, which is based in Minneapolis, has gained the confidence of clients throughout the upper Midwest and the nation, including industries, utilities, law firms, and all levels of government.

Barr has branch offices in Duluth and Hibbing, Minnesota; Jefferson City, Missouri; Ann Arbor, Michigan, and Bismarck, North Dakota. Drawing upon skills in more than two dozen technical areas, our staff is able to form multidisciplinary teams to meet those needs in the areas of:

- Solid and hazardous waste management and site remediation
- Water resources management
- Environmental management
- Air quality
- Process and materials handling
- Facilities and infrastructure engineering
- Information technology

Barr employs approximately 450 engineers, scientists, and support staff in the following disciplines:

Engineering/Design	Science	Support Services
Agricultural	Atmospheric Science	Accounting
Architectural	Biology	Computer Science
Chemical	Biochemistry	Drafting/Graphics
Civil	Chemistry	Field Operations
Electrical	Data QA/QC	Laboratory Operations
Environmental	Epidemiology	Library Science
Geologic	Forestry	Information Management
Geotechnical	Geochemistry	Public Relations
Hydraulic	Geology	Surveying
Hydrologic	Geophysics	Technical Writing
Mechanical	Hydrogeology	Word Processing
Structural	Industrial Hygiene	-
Water Resources	Public Health	
	Soil Science	
	Toxicology	

Barr uses a project team approach that matches our expertise with the unique requirements of each project. Overall responsibility for each project is maintained by an officer of the company. Barr

uses computer and data processing systems to manage and monitor budgets, staff workloads, and billings for all projects.

Quality control on each project is the responsibility of every member of the project team. Reports, designs, and specifications are prepared to meet the client's requirements. Barr's quality assurance program includes:

- Obtaining clear and complete understanding of the client's needs
- Communication among team members and with the client as work progresses
- Peer review as the work progresses
- Evaluation of completed documents for technical accuracy and cost-effectiveness

Qualifications and Experience – Environmental Site Assessments

Barr conducts environmental site assessments for a wide variety of clients involved in property and business transactions. Clients include cities, attorneys, developers, and private and public parties interested in selling, purchasing, or redeveloping property.

Barr has specialized in the investigation and design of remedial actions for contaminated sites since the early 1970s. Our company has completed hundreds of site investigations, feasibility studies, and remedial action designs. This experience includes work on most of the larger contaminated sites in Minnesota as well as numerous smaller sites. Barr has been a primary consultant on about two-thirds of the EPA National Priority List sites in Minnesota and has been involved in either a primary or secondary role on about half of the sites listed by the state of Minnesota. Barr's work on virtually all of these sites has been on behalf of potentially responsible parties. We have worked on contaminated sites in many other states as well.

Many projects are initiated by clients who are buying or selling property or who are required to conduct an environmental site assessment for financing purposes. Other projects are initiated by clients who suspect that contamination may be present on a site. Still other projects are in response to orders from regulatory agencies. Many of these projects involve a state voluntary cleanup program. Barr works for clients in both the public and private sectors, and clients range from major industries to state and federal agencies.

Barr has worked on a variety of properties, including:

- Steel and coke manufacturing
- Wood treating
- Petroleum refining
- Manufacturing (paint waste/spent solvents)
- Coal gasification
- Mining and mineral processing
- Petroleum product storage (above and below ground)
- Metal plating
- Scrapyards
- Landfills
- Fly and bottom ash
- Permitted and nonpermitted waste disposal facilities

Barr staff is familiar with a wide range of industrial practices and we provide environmental and waste management consulting to many industries. The resumes of the specific Barr staff who worked on this Assessment are included in the following pages.

Experience Eric Dott has 21 years of experience as a hydrogeologist and environmental professional performing Phase I environmental assessments, Phase II investigations, remediation, and brownfields redevelopment projects for a variety of clients. Eric's clients have included industrial, commercial, developer, property management, legal, county, municipal, and nonprofit group clients. Before joining Barr, he worked at the Minnesota Pollution Control Agency (MPCA), where his responsibilities included investigation and remediation of industrial chemical-release sites throughout Minnesota. While at the MPCA, Eric was involved in the development of the Agency's risk-based site-evaluation guidance.

Eric meets the definition of an "environmental professional" under the ASTM standard (E 1527-05) for Phase I environmental property assessments and has performed numerous Phase Is of active and inactive industrial manufacturing, railroad, warehouse, bulk-petroleum facilities, bulk-agricultural-chemical facilities, and commercial properties. His extensive practical experience with diverse types of industries and many different contaminant types allows him to recognize various types of problems and brings to clients a perspective on issues and property concerns that may arise. Eric's experience includes:

- Serving as senior project manager for team implementing cleanup of an elevenacre portion of the former Atlas Cement site for the city of Duluth. Assisted the City in preparing a winning site-cleanup grant that secured \$579,000 in grant funding for the cleanup work. The project was completed in eight months for 60 percent less than the initial approach was predicted to cost. Prepared systems to assist the city with tracking and administering its brownfield grant to maximize the use and streamline processing of eligible grant funds on the project.
- Serving as project manager for team investigation and implementation oversight of Barr's remediation plan for the redevelopment of the former Clyde Iron Works site in Duluth, Minnesota. The remediation work was conducted in conjunction with the construction of an ice arena and recreational sports facility and associated commercial development. Prepared or helped prepare seven brownfield grants totaling over \$3 million for assessment, cleanup, and redevelopment of the former Clyde Iron Works site.
- Managing Phase II investigation and site assessment work in support of the property transfer of a former grain elevator facility in a large metropolitan Midwest city. Identified concerns with site vandalism and damage to electrical transformers. Led rapid response to clean up and characterize spilled oil. Obtained agency closure and subsequent Phase II investigation approval in three months to support the sale transaction while addressing the oil impact to the satisfaction of all parties and the regulatory agency. The investigation, cleanup and successful agency closure allowed a multi-tenant residential and commercial redevelopment project to proceed on schedule at the former elevator site.
- Working on a brownfields redevelopment site in Brainerd, Minnesota, involving investigation, grant writing assistance, MPCA voluntary investigation and

cleanup (VIC) program liaison assistance, historic building renovation, demolition work, and new construction on a historic railroad engine maintenance and repair facility. Numerous large industrial buildings are listed on the historic registry and were renovated for new manufacturing and warehouse uses. Management of new infrastructure up-grades and demolition of steam tunnels and selected buildings required coordination with the developer, city engineers, regulatory staff, and contractors. The property was part of a former state Superfund site with on-going soil and groundwater remediation efforts by the former owner and responsible party. The redevelopment work was coordinated with the remediation project, and Barr managed environmental contingencies during redevelopment. Barr successfully helped the developer and City win two brownfield redevelopment grants to help fund portions of the project.

- Managing the City of Duluth's EPA-funded communitywide assessment grant projects in 2003-2004 and again in 2005-2008. Work included environmental inventory and review of more than 50 properties, 12 Phase I assessments involving historical and cultural review and investigation, five Phase II investigations, and one response action plan (RAP). Provided city support for EPA reporting and administrative documentation
- Helping the cities of Duluth and Hopkins, Minnesota, prepare successful cleanup grant applications from the Minnesota Department of Employment and Economic Development (DEED) brownfields grant program for Spring 2006 competition. Duluth won \$1.04 million and Hopkins won \$952,000. Also helped Hopkins win \$128,700 from Hennepin County's Environmental Response Fund and helped Duluth win \$875,000 in DEED redevelopment grant funding.
- Helping the cities of Duluth and New Brighton, Minnesota, prepare winning USEPA brownfields grant applications for Fall 2004 competition. Duluth won \$400,000 in assessment funding and New Brighton won \$400,000 in assessment funding and \$200,000 in cleanup funds.
- Helping the cities of Duluth and Mound, Minnesota prepare winning investigation and cleanup grant applications from the DEED brownfields grant program in Fall 2004 and Spring 2005 (\$99,000 and \$1.4 million, respectively).
- Performing Phase I, Phase II, demolition observation, and response action work on one-square city block in Minneapolis for a higher education institution client. Worked successfully with the VIC program, the former owner, contractors, and our client to finish the work on a fast-track schedule within four months.
- Providing Phase I assessments of multiple properties to Dakota County's (Minnesota) highway department to assist in new highway right-of-way acquisitions. Environmental issues discovered at a former automobile dealership property resulted in the discovery and excavation of a buried drum and soils impacted with solvent. Geoprobe soil and groundwater investigation work, followed by limited soil excavation, led to closure of the site within 6 months. Rapid turn-around by the Barr project team enabled the highway expansion project to proceed on schedule.

Eric Dott (cont.)

•	Performing a Phase I assessment and Phase II investigation of a former adhesives
	and coatings pilot plant and warehouse facility. This work required detailed
	historic and stratigraphic documentation leading to Minnesota VIC program
	issuance of retroactive liability assurances. This enabled the seller to establish
	that soil and groundwater impacts, related to earlier dumping activities, were not
	related to the pilot plant operation. Additional liability assurances were obtained
	for buyers that enabled the property sale to proceed while managing potential
	environmental liabilities for the seller and the buyer.

- Leading a team of six individuals performing Phase I assessments of 213 lease properties in 11 rail yards along a 70-mile-long railway corridor in west-central Minnesota. The assessments were followed by 27 Phase II investigations at 10 of the rail yards. This project was completed for a railroad client within a tight three-month schedule.
- Performing a Phase II soil investigation of a former bulk-agricultural-fertilizer facility. Investigation lead to fast-track soil remediation by excavating fertilizer impacted soils and treating by land application at agronomic rates on nearby agricultural fields. Project team worked closely with the Minnesota Department of Agriculture voluntary investigation and cleanup (AgVIC) program, resulting in liability assurances being issued to the new landowner, as well as likely project closure.
- Since the mid 1990s, working on dozens of projects that have involved the MPCA and Minnesota Department of Agriculture Voluntary Investigation and Cleanup programs.
- While at the MPCA, performing and overseeing contaminated sediment sampling and remediation project work at a former coke and steel mill site involving numerous clean-up technologies and evaluation of human and ecological risk concerns
- Participating in MPCA efforts to develop risk-based site evaluation and remedy selection guidelines for use at industrial chemical release sites in Minnesota. The guidance is used for enforcement sites as well as VIC sites.
- EducationM.S. Geology, Department of Geology and Geophysics, University of Wisconsin,
Madison, 1990
 - M.S. Water Resources Management, University of Wisconsin, Madison, 1989

B.S. Biology/Environmental Studies, The Evergreen State College, Olympia, Washington, 1981

- **Registration** Professional Geologist: Minnesota
- PublicationsDott, E. R., Mickelson, D., 1995, Lake Michigan water levels and the development of
Holocene beach-ridge complexes at Two Rivers, Wisconsin: stratigraphic,
geomorphic, and radiocarbon evidence. GSA Bull., 107:3, p.286-296.

Dott, E. R., 1993, Stratigraphic and radiocarbon evidence for Holocene lake level fluctuations at Two Rivers, Wisconsin, northwest shore of Lake Michigan, ed. Schnieder, Midwest Friends of the Pleistocene, Spring 1993, Field Guide Book.

Dott, E. R., 1990, Stratigraphy and lake level chronology of a Holocene age beach ridge complex: Two Rivers, Wisconsin, Master's Thesis, Department of Geology and Geophysics, University of Wisconsin, Madison, Wisconsin.

Managing Pesticides In Groundwater: A Decision-Making Framework, 1988. Water Resources Management workshop publication, co-authored with 11 other students, 205 p.

Beecher, H. A., Dott, E. R., and Fernau, R. F., 1988, Fish species richness and stream order in Washington State Streams. Environmental Biology of Fishes, 22: 3, pp. 193-209.

203184v2