

LIST OF PREPARERS

Name and Affiliation	SDEIS Responsibility and Qualifications
Minnesota Department of Natural Resources	
Lisa Fay	Project Manager B.S. Natural Resources and Environmental Studies 18 years experience in environmental review
Bill Johnson	Project Manager B.S. Psychology; B.S. Natural Resources and Environment Studies; M.S. candidate Forest Resources Policy and Administration 20 years experience in environmental review
Stuart Arkley	Project Manager B.S. Chemistry with Industrial Economics, J.D. Law 20 years environmental experience including environmental review, environmental policy, permitting, and rule development
Michael Berndt, Ph.D.	Research Scientist 3 B.S. Geology; B.S. Geophysics; M.S. Geology; Ph.D. Geology 25 years research experience specializing in aqueous geochemistry
Jason Boyle	Dam Safety Engineer B.S. Civil Engineering 12 years experience in dam safety regulation
Dana Dostert	Geotechnical Engineer B.S. Geophysics; B.S. Geotechnical Engineer 25 years experience in dam engineering, including hydrologic, hydraulic, and geotechnical engineering, dam failure analysis, and computer modeling related to dams
Jennifer Engstrom	Mineland Reclamation Section Manager B.A. Geology and Environmental Studies; M.S. Geology 8 years experience in mining research; 7 years experience in environmental review and permitting for mining projects

Name and Affiliation	SDEIS Responsibility and Qualifications
Mike Kunz, P.G.	Principal Planner B.S. Geology 25 years experience of technical and management experience in environmental impact assessment feasibility studies, regulatory review/compliance, and permitting, 2 years experience in mining environmental review/permitting
Julie Jordan	State Program Administrator, Principal B.S. Biology; M.S. Biology (Mineland Reclamation Emphasis) 27 years experience in mineland reclamation, planning, permitting, and environmental review
Lisa Joyal	Endangered Species Environmental Review Coordinator B.S. Wildlife Biology; B.A. Zoology; M.S. Wildlife Ecology 12 years experience in wildlife and wetland research and environmental review
Michael Liljegren	Hydrogeologist B.S. Geosciences 19 years experience in hydrogeology/hydrology and 9 years in mine permitting and environmental review
Doug Norris	Wetlands Program Coordinator B.S. Wildlife Science; M.S. Fisheries and Wildlife 25 years experience in environmental review and wetlands regulation
Michael Olson	Mining Reclamation Specialist, Sr. B.S. Geology; B.S. Geophysics 6 years experience in environmental review for mining
Zach Wenz, Ph.D.	Environmental Research Scientist B.S. Geology; M.S. Geology; Ph.D. Geology 4 years research experience in geochemistry

Name and Affiliation	SDEIS Responsibility and Qualifications
-----------------------------	--

U.S. Army Corps of Engineers

Tom Hingsberger	Project Manager B.A. Geology 15 years geology experience in civil works and 8 years experience in regulatory project management
-----------------	---

Doug Bruner	Lead Project Manager for Mining B.A. Geology; M.S. Engineering Geology 8 years experience in environmental geology/hydrogeology and 7 years regulatory project management
-------------	---

Steve Eggers	Wetland Mapping, Impacts and Mitigation B.S. Biology; Professional Wetland Scientist 33 years experience in Corps regulatory program involving wetland delineation, wetland impact assessment, and wetland mitigation
--------------	---

Brad Johnson	Cultural Resources Manager B.A. Anthropology; M.A. Interdisciplinary Archaeological Studies 32 years archaeology experience
--------------	---

Jeffrey McGrath	Socioeconomic Review B.S. Agricultural and Applied Economics 33 years experience in Water Resource Planning
-----------------	---

Neil Schwanz, P.E.	Geotechnical Engineer, Regional Technical Specialist B.C.E. Civil Engineering; M.C.E. Geotechnical 33 years experience in geotechnical engineering and design including embankment and structural dam design and remediation
--------------------	--

U.S. Forest Service

Shirley Frank	Environmental Coordinator B.S. Forest Resources 23 years NEPA and environmental planning experience
---------------	---

Name and Affiliation	SDEIS Responsibility and Qualifications
Susan Duffy	Recreation and Wilderness Program Manager B.S. Forestry and Natural Resource Management 29 years experience in forestry, recreation, wilderness, and NEPA
Henry Eichman	Economist B.A. Biology; M.S. Agricultural and Resource Economics 8 years experience in Environmental, Resource and Regional Economics and 6 years experience in NEPA and land management planning
Michael Jimenez	Forest Planner B.S. Natural Resource Management 24 years experience in NEPA and forest planning
Lee Johnson	USFS Cultural Resource Technical Lead B.A. Anthropology; M.A. Anthropology 12 years of review and compliance experience in cultural resources and historic preservation
Casey McQuiston	Forest Soil Scientist B.S. Biology 11 years experience in soil science and forest ecology
Lisa Radosevich-Craig	Tribal Liaison B.A. Political Science 15 years experience in federal public policy, public lands policy, and tribal relations
Dan Ryan	USFS Natural Resource Liaison B.S. Wildlife; B.S. Biology; M.S. Wildlife Biology 15 years experience in natural resource management and environmental planning
Marty Rye	Forest Hydrologist B.S. Agricultural Engineering – Soil and Water; B.S Civil Engineering – Water Resources 23 years experience as a hydrologist, water resource manager, and engineer

Name and Affiliation	SDEIS Responsibility and Qualifications
Elizabeth Schleif	Realty Specialist B.S. Civil & Environmental Engineering, Juris Doctorate (J.D.) 22 years real estate and surveying experience with the USDA Forest Service, 8 years private practice as property and business attorney
Mary Shedd	Natural Resources Team Leader B.A. Wildlife Ecology 33 years experience with USFS, including 4 years serving as Natural Resources Team leader
Sandra G. Skrien	Public Service Team Leader, Superior National Forest B.S. Biology 35 years experience working with USFS in Recreation, Wilderness, Land Use, and Visitor Services
Troy Thompson	Eastern Region Regional Hydrogeologist B.S. Geology; M.S. Geology 23 years total geological/hydrogeological experience (3 years oil and gas exploration, 18 years environmental hydrogeology, 2 years Federal land management with USFS)
Trent Wickman	Air Resource Management B.S. Environmental Engineering; B.S. Biology; M.S. Environmental Engineering 11 years experience in federal land management including assessing impacts to air quality related values of Class I areas, 6 years experience as an air quality permit engineer
Minnesota Pollution Control Agency	
Suzanne Baumann	Metallic Mining Sector Supervisor B.S. Biology 10 years experience in air quality compliance and enforcement, environmental review, and multi-media permitting
Erik Carlson	Metallic Mining Sector Supervisor B.S. Planning, Public Policy, and Management; M.S. Environmental Planning 10 years experience in urban and environmental planning and project management

Name and Affiliation	SDEIS Responsibility and Qualifications
Richard Clark, P.G.	Hydrogeologist B.S. Geological Engineering; M.S. Geology 26 years experience in water quality permitting and review of mining projects
Kristie Ellickson, Ph.D.	Air Risk Assessor B.A. Chemistry; Ph.D. Environmental Sciences/Public Health 4 years experience in human health risk assessment, trace metals speciation, fate/transport, and bioavailability
Ann Foss	Mining Sector Director B.S. Agricultural Engineering; M.S. Theoretical Mathematics 13 years multimedia permitting, environmental review, and compliance and enforcement experience with the mining sector
Anne Jackson	Principal Engineer B.S. Civil Engineering 22 years air emissions standards development and environmental review
Hongming Jiang, P.E.	Research Scientist B.S., M.S., Ph.D. in Agricultural Engineering 18 years air quality permitting for mining facilities and projects
Bruce Monson	Research Scientist III B.S. Zoology; M.S. Biology; Ph.D. Civil Engineering 26 years experience in environmental experience, specializing in mercury cycling and bioaccumulation
Catherine Neuschler	Planner Senior; Air Policy and Mobile Sources Unit B.A. Environmental Studies and Political Science; Master of Public Affairs 6 years experience in the State Implementation Plan, criteria pollutants, and visibility policy

Name and Affiliation	SDEIS Responsibility and Qualifications
Ruth Roberson	Research Scientist B.S. Agriculture; M.S. Soil Science (soil physics) 4 years experience as a research scientist conducting and reviewing atmospheric dispersion modeling for air quality and regulatory compliance purposes
Sarah Seelen	Air Permit Engineer B.A. Environmental Science; M.S. Environmental Engineering 5 years experience in air permit and environmental engineering
Ed Swain, Ph.D.	Research Scientist B.A. Biology; Ph.D. Ecology 23 years of research experience with acid deposition and mercury
Environmental Resources Management (ERM) and ERM subcontractors	
Al Trippel	Project Manager B.S. Geology; M.S. Geology 27 years working in mining industry and consulting on environmental, health and safety, and sustainability
Debra McGovern	Project Management B.A. Botany; M.S. Biology More than 30 years experience in environmental regulatory programs for government and private industry
Ross Vellacott	Project Management, Proposed Action and Alternatives Analysis B.S. Earth Science 7 years experience in impact assessment and compliance assurance on metallic mining and oil and gas projects
Dave Blaha, A.I.C.P.	Technical Water Lead; MEPA/NEPA Expert; Senior QA/QC B.A. Biology; Master of Environmental Management 26 years experience with NEPA, stakeholder engagement, and agency consultation

Name and Affiliation	SDEIS Responsibility and Qualifications
John L. Adams	Water Resources B.S. Forest Hydrology 31 years experience in mining hydrology, 10 years experience in forest hydrology
Adeyinka Afon	Noise B.S. Chemical Engineering, M.S.E. Environmental Process Engineering 4 years of consulting experience in environmental impact assessments, feasibility studies, and environmental permitting & compliance with specialization in air quality, air emissions inventory, noise, vibration, surface water quality, and sediment quality
Andy Bielakowski	Tribal and Cultural Resources B.S., B.A. Anthropology, Classical Civilizations, Philosophy; M.A. Archaeology 13 years experience in cultural resources and environmental impact assessment, survey, consultation, permitting, and impact mitigation
Pat Fleischauer	Air Quality and Noise B.A. Mathematics; M.S. Management; M.A. Economics, C. Phil Economics More than 30 years experience preparing NEPA- and state-mandated environmental impact assessments for private industry and public agencies
Bec Gawtry	Project Management, Biological Resources B.A. Biology 8 years experience in wildlife and vegetation impact assessments on mining and oil and gas projects
Heather Heater	Land Exchange, Wetlands, and Biological Resources B.S. Marine Biology; M.S. Environmental Resource Management 12 years experience in environmental impact assessments/statements, feasibility studies, environmental permitting including NEPA, and agency consultation
Steve Koster, P.E.	Biological and Natural Resources B.S. Letters and Engineering; B.S. Civil Engineering; M.S. Environmental Engineering 26 years experience in environmental impact assessment, permitting, and impact mitigation and remediation

Name and Affiliation	SDEIS Responsibility and Qualifications
Danny Kringel	Air Resources and Climate Change B.A. Mathematics 29 years experience in the management of a variety of air pollution studies, including dispersion modeling, air quality permitting, odor evaluations, air toxics/risk assessments, and litigation support
Dirk Leemkuil	Hazardous Materials and Legacy Contamination B.S. Geology 30 years experience in soil and groundwater contaminant assessment, investigation and corrective action; environmental assessment and environmental compliance
Howard Levine	NEPA/MEPA Specialist, Alternatives Analysis, and Cumulative Effects B.A. Geography; Masters of Professional Studies, Planning and Natural Resource Policy 25 years experience in environmental impact assessments
Steve Peterson, Ph.D.	Fish and Macroinvertebrates; Mercury B.S. Biological Sciences, Ph.D. Biological Sciences 25 years environmental impact and risk analysis focusing on ecological fate and effects of pollutants in aquatic ecosystems
Benjamin Sussman, A.I.C.P.	Land Use; Recreation and Visual Resources; Socioeconomics B.S. Science, Technology, and Society; MCRP City and Regional Planning 13 years experience in urban planning and impact assessment, focusing on land use, socioeconomics, transportation, recreation, and visual resources
Jeff Williams	Fish and Macroinvertebrates B.S. Biology 19 years experience in fisheries, aquaculture, wetland and habitat assessments, baseline environmental surveys, impact assessments and permitting
Houston Kempton Knight Piesold	Environmental Geochemist B.S. Geology and Geography; M.S. Geology 22 years experience in environmental geochemistry and hydrogeology related to modeling the mobility and removal of metals at hard-rock mines, and pilot testing of in situ groundwater remediation technologies

Name and Affiliation	SDEIS Responsibility and Qualifications
Bryan Ulrich, P.E., Pr. Eng. Knight Piesold	Geotechnical Engineer B.S. Mining Engineering; B.S. Geological Engineering; M.E. Geotechnical Engineering 25 years experience in the design, construction and assessment of civil/geotechnical design for mine facilities, including tailings facilities, heap leach pads, and waste rock facilities
Fred Marinelli, Ph.D., P.E. InTerra Logic	Groundwater Hydrologist; GoldSim Modeler B.A. Geology; M.S. Hydrology; Ph.D. Civil Engineering 35 years experience in all aspects of groundwater hydrology and hydraulics; 10 years experience developing dynamic system models for water management

LIST OF REFERENCES

GENERAL INFORMATION

The Reference Section follows the general Chicago Manual of Style Guidelines, in that the following information is included in each citation, where possible, and in this order:

1. Author Last Name, First Name [followed by second author First Name Last Name, and third author First Name Last Name, etc., if applicable].
2. Year of Publication.
3. *Title of Document*.
4. Publication Information.

For Example:

- Smith, David. 2013. *Updated Formatting Guide for NorthMet Reference List*. St. Paul, MN: The Best Printing Press.
- Smith, David and Mark Jones. 2012. *Basic Formatting for NorthMet Master Reference List*. *References Today*, 4(31), 50-62. April 1, 2012.
- Smith, David, Mark Jones, and John Doe. 2011. *Guidelines for Creating Consistency in Formatting*. Accessed: September 22, 2013. Retrieved from: <http://www.allaboutnorthmetrefs.com>

The in-text citations help the reader locate the full reference information in the Master Reference List. There are unique in-text citations for each reference, and they include the following information:

1. First author last name and second author last name, if applicable (first author last name followed by et al. for three or more authors)
2. Year of publication

For Example:

- (Smith 2013)
- (Smith and Jones 2012)
- (Smith et al. 2011)

-Page Intentionally Left Blank-

MASTER REFERENCE LIST

- 1854 Treaty Authority. 2007. *Code for Treaty Gathering*. July 24, 2007. Retrieved from: <http://1854treatyauthority.org/cms/files/Code%201854%20Gathering%202007.pdf>
- . 2012. *Ceded Territory Conservation Code*. Final Version, Revised Edition Approved on May 5, 2012. Retrieved from: <http://www.1854treatyauthority.org/cms/files/Code%201854%20Conservation%20Code%202012.pdf>
- . 2013. *1854 Treaty Authority Fishing Seasons, 2013-2014*. Board Approved March 14, 2013. Retrieved from: <http://1854treatyauthority.org/cms/files/Seasons%202012-2013%20Fishing.pdf>
- Abel, Rebecca L. 2011. *Measuring Habitat Use by Bats Using Acoustic Methods in Northeastern Minnesota*. Master's Thesis. January 2011.
- ACHP. See Advisory Council on Historic Preservation.
- Addison, John and Ernest E. McConnell. 2008. *A Review of Carcinogenicity Studies of Asbestos and Non-asbestos Tremolite and Other Amphiboles*. Regulatory Toxicology and Pharmacology Supplement, 52(1), 187-99. October 2008. Retrieved from: <http://www.sciencedirect.com/science/article/pii/S0273230007001493>
- Advisory Council on Historic Preservation (ACHP). 2008. *Consultation with Indian Tribes in the Section 106 Review Process: A Handbook*. Washington D.C.: Government Printing Office. Retrieved from: <http://www.achp.gov/regs-tribes2008.pdf>
- AECOM. 2009a. *2009 NorthMet Mine/Forest Service Additional Parcel Northern Goshawk and Owl Survey - Final Report*. Document No. 05461-007-0400. Prepared for PolyMet Mining Corporation. August 2009.
- . 2009b. *Threatened, Endangered, and Sensitive Species and Habitat Assessment for the Proposed PolyMet Land Exchange*. Document No. 05461-004-0400. Prepared for PolyMet Mining Corporation. October 2009.
- . 2011a. *2008 NorthMet Mine/Forest Service Additional Parcel Summer Wildlife and Wetland Assessment - Final Report*. Document No. 05461-005-0400. Prepared for PolyMet Mining Corporation. May 2011.
- . 2011b. *2009 Hay Lake Parcel and McFarland Parcel Summer Wildlife and Wetland Assessment Final Report*. Document No. 05461-008-0400. Prepared for PolyMet Mining Corporation. October 2011.
- . 2011c. *Hunting Club, Lake County, and Wolf Land Parcels Fall 2010 Wildlife and Wetland Assessment Final Report*. Document No. 6018-8563-0400. Prepared for PolyMet Mining Corporation. October 2011.
- . 2011d. *Wetland, Lake Shoreline, Stream Frontage, and Floodplain Assessment for the Proposed PolyMet Land Exchange*. Document No. 05461-004-0500. Prepared for PolyMet Mining Corporation. June 2011.

- Allan, Stacy. 1993. *Final Report on Data Recovery Investigations of the Cedar Creek Sites, 21AK58, a Multicomponent Habitation Site*. Cedar Creek Archaeological Data Recovery Project, Archaeology Department, Minnesota Historical Society.
- AluChem, Inc. 2010. *Magnesium Hydroxide MSDS*. CAS # 1309-42-8. September 10, 2010.
- Apfelbaum, S., R. Cockrell, J. Larson, D. Eppich, R. Odum, and N. Thomas. 1995. *Determination of Life Cycle Assessment Ecosystem Impact Indicators of Mining Activities for the Mesabi Iron Range, Minnesota*. October 1995.
- Apps, C.D. 2000. *Space-use, Diet, Demographics, and Topographic Associations of Lynx in the Southern Canadian Rocky Mountains: A Study*. In Ruggiero, L.F., K.B. Aubry, S.W. Buskirk, G.M. Koehler, C.J. Krebs, K.S. McKelvey, and J. R. Squires (eds.). *Ecology and Conservation of Lynx in the United States*, 351-371. Boulder, CO: University Press.
- Archer, D. 2005. *Fate of Fossil Fuel CO₂ in Geologic Time*. *Journal of Geophysical Research*, 110, C09S05. doi:10.1029/2004JC002626.
- Arrowhead. See Arrowhead Regional Development Commission.
- Arrowhead Regional Development Commission (Arrowhead). 2011. *City of Babbitt Comprehensive Plan*. Prepared for City of Babbitt. November 2011. Retrieved from: <http://www.arrowheadplanning.org/Default.asp?PageID=870>
- Arzigian, C. 2008. *Minnesota Statewide Multiple Property Documentation Form for the Woodland Tradition*. Mississippi Valley Archaeology Center at the University of Wisconsin LaCrosse. Report on file at the Minnesota State Historic Preservation Office.
- Atkins, Annette. 2007. *Creating Minnesota: A History from the Inside Out*. St. Paul, Minnesota: Minnesota Historical Society Press. Retrieved from: http://www.worldcat.org/title/creating-minnesota-a-history-from-the-inside-out/oclc/140101139&referer=brief_results
- Atkinson, M.A.L. 2006. *Chapter 4: Molecular and Cellular Responses to Asbestos Exposure*. From Ronald F. Dodson, Ph.D. and Samuel P. Hammar M.D (eds.). *Asbestos: Risk Assessment, Epidemiology, and Health Effects*. CRC Press.
- Auer, N.A. 1996. *Importance of Habitat and Migration to Sturgeons with Emphasis on Lake Sturgeon*. *Canadian Journal of Fisheries and Aquatic Sciences*, 53(S1), 152-160.
- Auer, N.A. (ed.). 2003. *A Lake Sturgeon Rehabilitation Plan for Lake Superior*. Great Lakes Fishery Commission, Miscellaneous Publication 2003-02. May 2003.
- BBER. See Bureau of Business and Economic Research.
- Bailey, T.N., E.E. Bangs, M.F. Portner, J.C. Malloy, and R.J. McAvinchey. 1986. *An Apparent Overexploited Lynx Population on the Kenai Peninsula, Alaska*. *Journal of Wildlife Management*, 50(2), 279-289.
- Balogh, S.J., E.B. Swain, and Y.H. Nollet. 2006. *Elevated Methylmercury Concentrations and Loadings During Flooding in Minnesota Rivers*. *Science of the Total Environment*, 368, 138-148.

- Barbour, M.T., J. Gerritsen, B.D. Snyder, and J.B. Stribling. 1999. *Rapid Bioassessment Protocols for Use in Streams and Wadeable Rivers: Periphyton, Benthic Macroinvertebrates and Fish*, Second Edition. EPA 841-B-99-002. Washington, D.C: U.S. Environmental Protection Agency; Office of Water. Retrieved from: <http://www.epa.gov/OWOW/monitoring/techmon.html>
- Barnard Dunkelberg. 2009. *Sitka Rocky Gutierrez Airport Final EIS*. Accessed: March 21, 2012. Retrieved from: <http://173.164.98.162/sitkaeis/feis.htm>
- Barr. See Barr Engineering.
- Barr Engineering (Barr). 1976. *1976 Physical Chemical Data Summary: Water Resources Monitoring, Minnamax Project, AMAX Exploration*. Minneapolis, MN.
- . 2005. *RS26 – Partridge River Level 1 Rosgen Geomorphic Survey*. Rosgen Classification Partridge River from Headwaters to Colby Lake. Draft-01. December 8, 2005.
- . 2006a. *Cumulative Wetland Effect Analysis – East Reserve Mining Project*. Prepared for Ispat Inland Mining Company. July 10, 2006.
- . 2006b. *RS02 – Hydrogeological – Drill Hole Monitoring and Data Collection – Phase 1*. Hydrogeologic Investigation – Phase 1. PolyMet NorthMet Mine Site. Draft-02. November 16, 2006.
- . 2006c. *RS10 – Hydrogeological – Drill Hole Monitoring and Data Collection – Phase 2*. Hydrogeologic Investigation – Phase II. PolyMet NorthMet Mine Site. Draft-02. November 16, 2006.
- . 2006d. *RS14 – Wetland Delineation and Wetland Functional Assessment Report*. Draft-02. November 20, 2006.
- . 2006e. *RS44 – Wetland Hydrology Study Report*. Draft-02. November 20, 2006.
- . 2006f. *RS64 – Technical Memorandum: Existing Tailings Basin Water Information*. Draft-01. February 7, 2006.
- . 2006g. *RS 70 – Mercury Deposition and Bioaccumulation Cumulative Impact Report, Cumulative Impacts Analysis, Minnesota Iron Range Industrial Development Projects, Mercury Deposition and Evaluation of Bioaccumulation in Fish in Northeast Minnesota*. November 2006.
- . 2006h. *RS71 – Cumulative Impacts Analysis, Minnesota Iron Range Industrial Development Projects, Assessment of Potential Visibility Impacts in Federal Class I Areas in Minnesota*. November 2006.
- . 2007b. *RS10A – Hydrogeological – Drill Hole Monitoring and Data Collection – Phase 3*. Hydrogeologic Investigation – Phase III. March 2007.
- . 2007c. *RS14 – Supplemental Information to the Wetland Delineation Report*. Addendum 01. Submitted in support of the PolyMet Mining Corp.'s NorthMet Mine and Ore Processing Facilities Project Detailed Project Description. September 2007.
- . 2007d. *RS22 – Mine Waste Water Management for the PolyMet NorthMet Mine Site*. Technical Detail Report. Draft-02. October 17, 2007.

- . 2007e. *RS29T – Technical Design Evaluation Report - Wastewater Treatment Technology NorthMet Project*. Draft-02. March 30, 2007. Addendum, October 2007.
- . 2007f. *RS52 – PolyMet Technical Design Evaluation Report - Mine Closure Plan Report*. July 2007.
- . 2007g. *RS55T – Tailings Basin Modifications to Eliminate Water Release via Seepage*. PolyMet Technical Design Evaluation Report. Draft-02. February 13, 2007.
- . 2007h. *RS63 – Technical Memorandum: Updated PolyMet Mining Baseline Surface Water Quality Information Report*. Draft-02. June 29, 2007.
- . 2007i. *RS76 – Technical Memorandum: Summary and Interpretation of Surface Water Quality Monitoring Data, PolyMet Mining Company*. June 27, 2007.
- . 2007j. *Technical Memorandum: Results of Autumn 2007 Field Surveys for Botrychium rugulosum at PolyMet Mine Site*. November 7, 2007.
- . 2007k. *RS70 – Addendum 01, Supplemental Information to the November 2006 Air Quality Cumulative Impact Assessment Report on Mercury Deposition and Evaluation of Bioaccumulation in Fish in Northeast Minnesota*. August 2007.
- . 2007l. *RS58A – Emission Control Technology Review for NorthMet Project Processing Plant*. October 2007.
- . 2007m. *RS61 – Fiber Information, NorthMet Mine and Ore Processing Facilities Project, Fibers Data Related to the Processing of NorthMet Deposit Ore*. Draft-03. June 2007.
- . 2007o. *RS58B – Emission Control Technology Review for NorthMet Project Mine Site*. Draft-02. September 2007.
- . 2008a. *RS74 – External Memorandum: Changes to the Tailings Basin Flows in the Embarrass River Watershed*. Memo to J. Scott and S. Arkley from K. Wenigmann, G. Williams, and M. Wong. October 14, 2008.
- . 2008b. *Technical Memorandum: Lined Tailings Basin Alternative – EIS Data Request*. From Gregg Williams, Mark Jacobson, Cheryl Feigum at Barr Engineering Company to the PolyMet Project File. Project No. 23/69-862-006-001. April 8, 2006.
- . 2008c. *RS13B – Tailings Basin – Mitigation Design Water Balance*. Draft-01. September 8, 2008.
- . 2008d. *RS22B – Mine Site Model Report, Appendix B: Groundwater Modeling of the NorthMet Mine Site*. Draft-03. St. Paul, Minnesota.
- . 2008e. *RS73B – Streamflow and Lake Level Changes: Hydrologic/Hydraulic Modeling Results for the PolyMet NorthMet Mine Site*. Draft-03. September 12, 2008.
- . 2008f. *RS74A – Surface Water and Groundwater Quality Modeling: Mine Site*. Draft-02. September 16, 2008.
- . 2008g. *RS74B – Surface Water and Groundwater Quality Modeling: Plant Site*. Draft-02. September 14, 2008.

- . 2008h. *Technical Memorandum: Indirect Wetland Impacts at the Mine Site*. From Cheryl Feigum, Mark Jacobson at Barr Engineering Company to Jon Ahlness, Steve Dewar. Project No. 23/69/-862-008-002. June 2, 2008.
- . 2008i. *Technical Memorandum: Plant Site Groundwater Impacts Predictions*. November 12, 2008.
- . 2008j. *Technical Memorandum: Water Quality Estimates for LTVSMC Tailings Basin Cell 2E and Cell 2W Seepage*. February 8, 2008.
- . 2008k. *Technical Memorandum: Wetland Impacts - Tailings Basin Mitigation Alternative*. From Mark Jacobson, Cheryl Feigum at Barr Engineering Company to Jon Ahlness, Stuart Arkley. Project No. 23/69/-862-006-001. June 2, 2008.
- . 2008l. *Technical Memorandum: Wetland Impacts - Tailings Basin Mitigation Alternative*. From Mark Jacobson, Cheryl Feigum at Barr Engineering Company to Stuart Arkley. Project No. 23/69/-862-006-001. May 28, 2008.
- . 2008m. *RS20T – Wetland Mitigation Plan*. Report Prepared for PolyMet Mining, Inc. Draft-04. January 15, 2008.
- . 2008n. *RS57A – Stationary Point and Fugitive Source Emission Calculations for the NorthMet Project Plant Site*. November 2008.
- . 2008o. *Long-Range Hydrology Study Final Report*. Prepared for Northshore Mining Company. November 2008.
- . 2009a. *Cumulative Effects Analysis of Wildlife Habitat and Threatened and Endangered Wildlife Species: Keetac Expansion Project*. Prepared for U.S. Steel. February 2009.
- . 2009b. *Draft 2009 Wild Rice and Sulfate Monitoring: Spring Mine Creek, Embarrass River, Partridge River, Pike River, and Lower St. Louis River*. Prepared for PolyMet Mining Corporation. September 2009.
- . 2009c. *Technical Memorandum: Colby Lake Water Quality Samples*. April 7, 2009.
- . 2009d. *Technical Memorandum: Results of Residential Well Sampling North of LTVSMC Tailings Basin*. January 27, 2009.
- . 2009e. *Technical Memorandum: Results of Tailings Basin Hydrogeological Investigation*. June 2, 2009.
- . 2009f. *Technical Memorandum: Tailings Basin Area Geologic and Hydrogeologic Setting*. Memo to Stuart Arkley, MDNR, from Tom Radue and Tina Pint, Barr. April 2, 2009.
- . 2009g. *NorthMet Project Greenhouse Gas and Climate Change Evaluation Report*. Prepared for PolyMet Mining Inc. Minneapolis, Minnesota. June 2009.
- . 2009h. *Technical Memorandum: TB-1 Preliminary Results of Site-Specific Soil Sorption Tests: Tailings Basin Area*. To Jim Scott, PolyMet, from Don E. Richard. June 24, 2009.
- . 2010a. *2009 Wild Rice Survey and Sulfate Monitoring Report*. Prepared for Mesabi Nugget Phase II.

- . 2010b. *NorthMet Project Baseline Wetland Type Evaluation*. Prepared for PolyMet Mining Corporation. March 2010.
- . 2010c. *Technical Memorandum: Results from the Additional Baseline Monitoring for Sulfate and Methylmercury in the Embarrass River Watershed, July – November 2009*. April 9, 2010.
- . 2010d. *Wetland Hydrology Monitoring Report 2007-2009*. Prepared for PolyMet Mining Corporation. March 2010.
- . 2011a. *2010 Wild Rice and Water Quality Monitoring Report: Second Creek, Spring Mine Creek, Trimble Creek, Unnamed Creek (PM 11), Wyman Creek, Embarrass River, Partridge River, Pike River, and St. Louis River*. Prepared for PolyMet Mining Corporation. January 2011.
- . 2011b. *Aquatic Biota Survey Report for the NorthMet Project*. Prepared for PolyMet Mining Corporation. August 2011.
- . 2011c. *Mineral Character Determination Related to Exchange of Lands Between Polymet Mining and USFS*. Prepared for PolyMet Mining Corporation. December 1, 2011.
- . 2011d. *NorthMet Project Baseline Wetland Type Evaluation*. Report Prepared for PolyMet Mining, Inc. Hoyt Lakes, Minnesota. April 2011.
- . 2011e. *Proposed Water Management Plans*. Mesabi Nugget Phase II Project. Prepared for Mesabi Mining, LLC. February 2011.
- . 2011g. *NorthMet Mine and Ore Processing Facility Project, Mineral Fibers Data Related to the Processing of NorthMet Deposit Ore, Addendum 02. Fine Particle Air Emission Control Technology Update*. December 2011.
- . 2011h. *Work Plan for a Supplemental Air Emissions Risk Analysis (AERA) for the NorthMet Mine Site, Version 2*. November 14, 2011.
- . 2011i. *NPDES Field Studies Report - SD026*. Prepared for Cliffs Erie L.L.C. and Polymet Mining Inc. September 2011.
- . 2011j. *Technical Memorandum: Comparison of Hydrogeologic Setting – Canisteo Pit, Minntac Mine near Kinney, and NorthMet Mine Site*. May 22, 2011.
- . 2011k. *Zim Sod Wetland Mitigation Site Wetland Mitigation Plan. Preliminary Wetland Mitigation Plan 2011*. Prepared for PolyMet Mining, Inc. Hoyt Lakes, Minnesota. November 2011.
- . 2011m. *NPDES Field Studies Report - SD033*. September 2011.
- . 2011n. *NPDES Field Studies Report - Tailings Basin*. September 2011.
- . 2012a. *2011 Wild Rice and Water Quality Monitoring - Second Creek, Spring Mine Creek, Trimble Creek, Unnamed Creek PM 11, Wyman Creek, Embarrass River, Partridge River, and Pike River*. February 2012.
- . 2012b. *Cumulative Impacts Analysis: Local Mercury Deposition and Bioaccumulation in Fish*. Prepared for PolyMet Mining Inc. July 2012.

- . 2012d. *NorthMet Mine Site Water Modeling Work Plan, Version 6*. February 14, 2012.
- . 2012e. *NorthMet Plant Site Water Modeling Work Plan, Version 6*. April 13, 2012.
- . 2012g. *Memo: Partridge River Hydrologic Impacts-XP-SWMM Results*. From Greg Williams, Barr to Mike Liljegren, MDNR. December 10, 2012.
- . 2012h. *Technical Memorandum: Summary of Water Related Model Calibrations and Plant Site Corroborations*. Technical Memorandum. From Greg Williams Barr Engineering , to Erik Carlson MN DNR. July 24, 2012.
- . 2012i. *NorthMet Memorandum: Traffic Information*. February 8, 2012.
- . 2012k. *Class I Area Air Dispersion Modeling Report, Version 2*. May 2012.
- . 2012p. *Class II Mine Site Air Quality Dispersion Modeling Report, Version 2*. August 2012.
- . 2012q. *Class II Plant Site Air Quality Dispersion Modeling Report, Version 2*. November 2012.
- . 2012r. *Mercury Emission Control Technology Review for NorthMet Project Processing Plant, Version 2*. February 2012.
- . 2012s. *Green House Gas and Climate Change Evaluation, NorthMet Project*. June 2012.
- . 2012v. *Technical Memorandum: Response to Questions on Saline Groundwater*. From John Swenson and Jere Mohr, Barr, to Bill Johnson, MDNR. September 7, 2012.
- . 2012w. *Technical Memorandum: Results of Sensitive Plant Species Surveys Along Dunka Road and Pipeline Route*. Minneapolis, Minnesota. Original date: August 8, 2008. Revised: February 3, 2012.
- . 2012x. *Cumulative Impacts Analysis, Assessment of Potential Visibility Cumulative Impacts in Federal Class I Areas in Minnesota, Version 3*. January 2012.
- . 2012y. *Technical Memorandum: Mine Site Surficial Aquifer Dataset Size*. From Tina Pint, Barr, to Tom Hingsberger, USACE; Tom Hale, USFS; and Erik Carlson, MDNR. July 6, 2012.
- . 2012z. *Table 3A: Attachment to Form AQDMR-01: NorthMet Plant Site Alone NAAQS/MAAQS Modeling Results*. In *Class II Plant Site Air Quality Dispersion Modeling Report, Version 1*. August 2012.
- . 2013a. *CDF059 Tributary Flow Augmentation, Version 4*. January 25, 2013.
- . 2013b. *Technical Memorandum: Ongoing Data Collection for the NorthMet Water Quality Modeling, aka Data Sufficiency Document, Version 3*. February 25, 2013.
- . 2013c. *NorthMet Project - Local Mercury Deposition and Bioaccumulation in Fish, Addendum 01*. March 13, 2013.
- . 2013d. *Potential Emissions – Processing Plant*. Hoyt Lakes, Minnesota.
- . 2013f. *Water Modeling Results, Version 5*. February 2013.

- . 2013g. *Final Pilot Testing Report*. Plane Site Wastewater Treatment Plant Pilot Testing Program. Prepared for PolyMet Mining Inc. January 2013.
 - . 2013h. *Technical Memo: Background Concentration of Beryllium and Manganese*. January 4, 2013.
 - . 2013i. *CDF061 – Plant Site Groundwater Flow Method, Version 1*. January 17, 2013.
 - . 2013j. *Air Emissions Risk Analysis – Mine Site Supplement, Version 3*. February 2013.
 - . 2013k. *Air Emissions Risk Analysis – Plant Site Supplement, Version 3*. March 2013.
 - . 2013l. *Technical Memorandum: NorthMet Flotation Tailings Basin: Containment System Effects on Slope Stability*. April 19, 2013.
 - . 2013m. *2012 Wild Rice and Water Quality Monitoring Summary*. Prepared for PolyMet Mining Inc. January 2013.
 - . 2013n. *CDF062 Colby Lake Probabilistic Water Quality, Version 2*. January 31, 2013.
 - . 2013o. *Model Results Review, Mine Site Version 5.0. Arsenic in Colby Lake, Version 2*. July 19, 2013.
 - . 2013p. *Rosgen Classification: Unnamed Creek South of Dunka Road*. Prepared for PolyMet Mining, Inc. September 2013.
 - . 2013q. *Technical Memorandum: Wildrice Survey Results Summary*. From Rachel Walker, Barr, to Bill Johnson, MDNR; Shirley Frank, USFS; Doug Bruner, USACE. November 5, 2013.
- Barr Engineering and HC Itasca. 2009. *Dissolved Solids and Chemical Balance – Mesabi Nugget Phase II Project*. Draft 01. Prepared for Steel Dynamics, Inc. Mesabi Mining, LLC by Barr Engineering and HC Itasca. December 14, 2009.
- Bassett Acoustics. 2004. *Environmental Impact Statement for the Clermont Coal Mine Project*. Queensland, Australia. August 2004.
- Bell Museum of Natural History. 2011. *Bell Museum of Natural History Vascular Plant Database*. Saint Paul, MN: University of Minnesota Herbarium. Accessed: August 16, 2011. Retrieved from: <http://www.wildflowers.umn.edu>
- Benton-Banai, E. 1988. *The Mishomis Book: The Voice of the Ojibway*. St. Paul, MN: Indian County Press and Publications, Inc.
- Berens and Raske, THPO. Personal Communication. NorthMet Project Historic Properties Consultation. April 29, 2013.
- Berman and Crump. 2003. *Final Draft: Technical Support Document for a Protocol to Assess Asbestos-Related Risk*. Berman and Crump Protocol, Prepared for Office of Solid Waste and Emergency Response. Washington DC: USEPA. Original version September 4, 2001, updated in 2003.
- Berndt, M.E. 2003. *Mercury and Mining in Minnesota*. Minerals Coordinating Committee, Final Report. Submitted June 30, 2003, Revised October 15, 2003. Retrieved from: http://files.dnr.state.mn.us/lands_minerals/mercuryandmining.pdf

- Berndt, M. and T. Bavin. 2012a. *Methylmercury and Dissolved Organic Carbon Relationships in a Wetland-rich Watershed Impacted by Elevated Sulfate From Mining*. Environmental Pollution, 161. February 2012. doi:10.1016/j.envpol.2011.06.006.
- . 2012b. *On the Cycling of Sulfur and Mercury in the St. Louis River Watershed, Northeastern Minnesota: An Environmental and Natural Trust Fund Final Report*. St. Paul, MN: Minnesota Department of Natural Resources. August 15, 2012.
- Bettis, E.A. III and D.M. Thompson. 1981. *Holocene Landscape Evolution in Western Iowa - Concepts, Methods, and Implications for Archaeology*. In S.F. Anfinson (ed.). *Current Directions in Midwestern Archaeology: Selected Papers from the Mankato Conference*, pp. 1–14. Occasional Papers in Minnesota Archaeology, 9. St. Paul, MN: Minnesota Archaeological Society.
- Bies, David and Carol Hansen. 2009. *Engineering Noise Control, Fourth Edition*. New York, NY: Taylor & Francis.
- Bloom, N. S. 1992. *On the Chemical Form of Mercury in Edible Fish and Marine Invertebrate Tissue*. Canadian Journal of Fisheries and Aquatic Sciences, 49(5), 1010-1017.
- Bottomley, D.J. 1996. *A Review of Theories on the Origins of Saline Waters and Crines in the Canadian Precambrian Shield*. Wastes and Impacts Division, Directorate of Fuel Cycles and Materials Regulation. Atomic Energy Control Board: Ottawa, Canada. February 1996.
- Bradley, W.C., J.M. Rhymer, and M. McCollough. 2002. *Habitat Selection by Wood Turtles (Clemmys insculpta): An Application of Paired Logistic Regression*. Ecology, 83(3), 833-843.
- Brand, C.J. and L.B. Keith. 1979. *Lynx Demography During a Snowshoe Hare Decline in Alberta*. Journal of Wildlife Management, 43(4), 827-849.
- Branfireun, B.A., N.T. Roulet, C.A. Kelly, and W.M. Rudd. 1999. *In Situ Sulphate Stimulation of Mercury Methylation in a Boreal Peatland: Toward a Link Between Acid Rain and Methyl Mercury Contamination in Remote Environments*. Global Biochem Cycles, 13(3), 743–750.
- Branfireun, B.A., K. Bishop, N.T. Roulet, G. Granberg, and M. Nilsson. 2001. *Mercury Cycling in Boreal Ecosystems: The Long-term Effect of Acid Rain Constituents on Peatland Pore Water Methylmercury Concentrations*. Geophysical Research Letters, 28(7), 1227-123.
- Branfireun B.A. and N.T. Roulet. 2002. Controls on the Fate and Transport of Methylmercury in a Boreal Headwater Watershed, Northwestern Ontario, Canada. Hydrology and Earth System Science, 6(4), 785–794.
- Breneman, D. 2005. *Stream and Wetland Biological Survey*. NRRI Technical Report Number NRRI/TR-2005/05. Prepared for PolyMet Mining Corporation. February 2005.
- Brooks, K.N. 1992. *Chapter 10: Surface Hydrology*. In Wright, H.E. (ed.). *The Patterned Peatlands of Northern Minnesota*, 153-162. Minneapolis: University of Minnesota Press.
- Burdett, C.L. and G.J. Niemi. 2002. *Conservation Assessment for Three-toed Woodpecker (Picoides tridactylus)*. Prepared for U.S.D.A. Forest Service (USFS). October 2002.

- Bureau of Business and Economic Research (BBER). 2009. *The Economic Impact of Non-Ferrous Mining on the State of Minnesota and the Arrowhead Region and Douglas County, WI*. Duluth, MN: University of Minnesota Duluth, Labovitz School of Business and Economics, Bureau of Business and Economic Research. March 2009.
- . 2012. *NorthMet Economic Impact 2011 Update: Economic Impact of PolyMet's NorthMet Project on St. Louis County, Minnesota*. Duluth, MN: University of Minnesota Duluth, Labovitz School of Business and Economics, Bureau of Business and Economic Research. March 2012.
- Burns, Mary. 1985. *Preliminary Survey of Historical Routes and Trails in Northern Wisconsin and Upper Michigan*. Mercer, WI: Sigurd Olson Environmental Institute.
- Buskirk, S.W., L.F. Ruggiero, and C.J. Krebs. 2000. *Habitat Fragmentation and Interspecific Competition: Implications for Lynx Conservation*. In Ruggiero, L.F., K.B. Aubry, S.W. Buskirk, G.M. Koehler, C.J. Krebs, K.S. McKelvey, and J. R. Squires (eds.). *Ecology and Conservation of Lynx in the United States*, 83-100. Boulder, CO: University Press.
- CEQ. See Council on Environmental Quality.
- COSEWIC. See Committee on the Status of Endangered Wildlife in Canada.
- CSCC. See Ciba Specialty Chemicals Corporation.
- CSS. See College of St. Scholastica.
- Canada. See Government of Canada.
- Carlisle, D.M., M. R. Meador, T.M. Short, C.M. Tate, M.E. Gurtz, W.L. Bryant, J.A. Falcone, and M.D. Woodside. 2013. *The Quality of Our Nation's Waters—Ecological Health in the Nation's Streams, 1993–2005*. U.S. Geological Survey Circular 1391. Retrieved from: <http://pubs.usgs.gov/circ/1391/>
- Chester, Albert H. 1902. *Explorations of the Iron Regions of Northern Minnesota, During the Years 1875 and 1880*. St. Paul, Minnesota. May 3, 1902.
- Christian, D.P. 1993. *Distribution and Abundance of Bog Lemmings (*Synaptomys Cooperi* and *S. Borealis*) and Associated Small Mammals in Lowland Habitats in Northern Minnesota Sensitive Small Mammals of the Chippewa National Forest*. Prepared for John Mathisen, CNF, and Rich Baker, MDNR. March 1993.
- Ciba Specialty Chemicals Corporation (CSCC). 2005. *MagnaFloc 342 MSDS*. October 7, 2005.
- City of Babbitt. 1996. *Zoning Ordinance for the City of Babbitt*. Hard copy on file with the City of Babbitt, Babbitt Minnesota. Accessed: October 6, 2011.
- Clark, R., MPCA. Personal Communication. Hg values for POTW discharges. April 29, 2013.
- ClearTech Industries Inc. 2010. *Potassium Permanganate MSDS*. April 1, 2010.
- Cleland, D.T., P.E. Avers, W.H. McNab, M.E. Jensen, R.G. Bailey, T. King, W.E. Russell. 1997. *National Hierarchical Framework of Ecological Units*. In Boyce, M. S. and A. Haney, A. (eds.). 1997. *Ecosystem Management Applications for Sustainable Forest and Wildlife Resources*, 181-200. New Haven, CT: Yale University Press.

- Cleland, Charles E. and Richard A. Carlson, Jr. 2002. *The Elders Speak: Natural Resource use by the Forest County Potawatomi Community*. Report prepared for the Forest County Potawatomi Community by Aurora Associates.
- Cliffs Erie. 2009. *Cliffs Erie Tailings Basin Monitoring Surface Water and Ground Water Sampling Results*. May 2009.
- Clifton, James A., George Cornell, and James M. McClurken. 1986. *People of the Three Fires: the Ottawa, Potawatomi and Ojibway of Michigan*. Grand Rapids: Michigan Indian Press.
- Climate Registry, The. 2008. *Accurate, Transparent, and Consistent Measurement of GHGs Across North America*. General Reporting Protocol. Version 1.1. May 2008.
- Clinton, President William J. 1994. *Memorandum on Government-to-Government Relations with Native American Tribal Governments*. April 29, 1994. Retrieved from: <http://www.gpo.gov/fdsys/pkg/WCPD-1994-05-02/pdf/WCPD-1994-05-02-Pg936.pdf>
- Cochran, P.A and T.C. Pettinelli. 1987. *Northern and Southern Brook Lampreys (Ichthyomyzon fossor and I. gagei) in Minnesota*. Prepared for Conservation Biology Research Grants Program, Division of Ecological Services, Minnesota Department of Natural Resources.
- Coffin, B., and L. Pfannmuller, eds. 1988. *Minnesota's Endangered Flora and Fauna*. Minneapolis, MN: University of Minnesota Press.
- College of St. Scholastica (CSS). 2012. *Fast Facts*. Accessed: May 9, 2012. Retrieved from: <http://www.css.edu/About/Fast-Facts.html>
- Committee on the Status of Endangered Wildlife in Canada (COSEWIC). 2003. *COSEWIC Assessment and Update Status Report on the Shortjaw Cisco Coregonus Zenithicus*. Retrieved from: <http://publications.gc.ca/collections/Collection/CW69-14-252-2003E.pdf>
- Compeau, G.C. and R. Bartha. 1985. *Sulfate-reducing Bacteria: Principal Methylators of Mercury in Anoxic Estuarine Sediment*. Applied and Environmental Microbiology, 50, 498-502.
- Cook County. 2011. *Online Zoning Information database*. Retrieved from: <http://www.co.cook.mn.us/index.php/government/departments/planning-and-zoning>
- Cooper, L. and E. Johnson. 1964. *Sandy Lake Ware and its Distribution*. American Antiquity, 29(4).
- Cummins, K.S., and C.A. Mayer. 1992. *Field Guide to Freshwater Mussels of the Midwest*. Manual 5. Champagne, IL: Illinois Natural History Survey.
- Council on Environmental Quality (CEQ). 1981. *Memorandum to Agencies: Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations: 2a. Alternatives Outside the Capability of Applicant or Jurisdiction of Agency*. Retrieved from: <http://ceq.hss.doe.gov/nepa/regs/40/1-10.HTM>
- . 1997. *Considering Cumulative Effects Under the National Environmental Policy Act. Council on Environmental Quality*. Executive Office of the President. Washington, DC. January 1997. Retrieved from: http://ceq.hss.doe.gov/publications/cumulative_effects.html
- DOJ. See U.S. Department of Justice.

DOI. See U.S. Department of the Interior.

Davis, Jessie C. 1968. *Beaver Bay Original North Shore Village*. Duluth, MN: St. Louis County Historical Society.

Day, Stephen. 2008. *Memo: RS46 Agency Work Plan Request for Section 4.1 DRAFT*. SRK Consulting. Memo to Jim Scott, PolyMet. June 18, 2013.

Deckard, D., MDNR. Personal Communication. NorthMet EIS: USFS Silviculturist. April 26, 2012.

DelGiudice, Glenn D., Michael DonCarlos, and John Erb. 2007. *An Incidental Take Plan for Canada Lynx and Minnesota's Trapping Program*. St. Paul, MN: Minnesota Department of Natural Resources.

Dobbs, Clark, A. 1989 *Outline of Historic Contexts for the Prehistoric Period ca.12,000B.P. – A.D. 1700*. In Minnesota History in Sites and Structures: A Comprehensive Planning Series. Institute for Minnesota Archaeology Reports of Investigations Number 37. Prepared for the Minnesota State Historic Preservation Office.

Doll, R. and J. Peto. 1985. *Asbestos: Effects on Health of Exposure to Asbestos*. HMSO Publishing. ISBN 0 11 883803 2.

Dore, W.G. 1969. *Wild Rice*. Ottawa, Canada: The Queen's Printer for Canada.

Douglas, M., I.D. Clark, K. Raven and D.J. Bottomley. 2000. *Groundwater Mixing Dynamics at a Canadian Shield Mine*. Journal of Hydrology, 235(1-2), 88-103. August 2000.

Dow Chemical Company. 2009. *Methyl Isobutyl Carbinol Product Safety Assessment*. June 26, 2009.

Duffy, S. and Judy Ness, USFS. Personal Communication. NorthMet Land Exchange - ROS & SIO Designations. November 2011.

Dyno (Dynamo Nobel). 2010. *Blasting and Explosives Quick Reference Guide*. 2010.

EDR. See Environmental Data Resources, Inc.

EDS. See Engineered Drilling Solutions.

ENSR. See ENSR International.

ERM. See Environmental Resources Management.

Edwards, A.J. 2012. *1994-2011 Big Game and Furbearer Harvest Report*. 1854 Treaty Authority. Technical Report 12-02. February 2012.

eFlora. 2011. *Flora Search Engine*. Accessed: August 16, 2011. Retrieved from: www.efloras.org

Eggers, S.D. 2011a. *Technical Memorandum: Distinguishing Between Bogs That Are Entirely Precipitation Driven Versus Those with Some Degree of Mineral Inputs from Groundwater and/or Surface Water Runoff*. November 7, 2011.

---. 2011b. *USACE Draft Memorandum: Distinguishing Between Bogs That Are Entirely Precipitation Driven Versus Those with Some Degree of Mineral Inputs from Groundwater and/or Surface Water Runoff*. September 12, 2011.

- Eggers, S.D., and D.M. Reed. 1997. *Wetland Plants and Communities of Minnesota and Wisconsin*. U.S. Army Corps of Engineers, St. Paul District. Retrieved from:
<http://www.npwrc.usgs.gov/resource/plants/mnplant/index.htm>
- Eichman, H., USFS Economist. Personal Communication. NorthMet: Value Added. July 26, 2013.
- Emmons & Olivier Resources, Inc. 2006. Cumulative Effects Analysis on Wildlife Habitat and Travel Corridors in the Mesabi Iron Range and Arrowhead Regions of Minnesota. Prepared for the Minnesota Department of Natural Resources. May 1, 2006.
- Engineered Drilling Solutions, Inc. 2009a. *MagnaFloc 10 MSDS*. 2009. Prepared by Engineered Drilling Solutions, Inc., Safety Department, October 1, 2009.
- . 2009b. *MagnaFloc 351 MSDS*. 2009. Prepared by Engineered Drilling Solutions, Inc., Safety Department, October 1, 2009.
- ENSR International (ENSR). 2000. *Winter 2000 Wildlife Survey for the Proposed NorthMet Mine Site, St. Louis County, Minnesota*. Document No. 5461-001-300, Polymet Mining Corporation, Golden, CO.
- . 2005. *NorthMet Mine Summer Fish and Wildlife Study*. Document No. 05461-002-400.
- . 2006. *RS62 Canada Lynx Assessment Final Report*. Draft-01. Document No. 05461-002-320. Prepared for PolyMet Mining Corporation PolyMet. August 2006.
- Environmental Data Resources, Inc. (EDR). 2009a. *EDR Radius Map Report with GeoCheck, McFarland Lake*. PolyMet Land Exchange. Inquiry Number 2525843.1s. June 23, 2009.
- . 2009b. *DataMap Area Study*. PolyMet Land Exchange. Inquiry Number 2525996.1r. June 25, 2009.
- . 2011a. *EDR Radius Map Report with GeoCheck, Lake County Land North / Wolf Land 1*. Inquiry Number 3034605.2s. April 7, 2011.
- . 2011b. *EDR Radius Map Report with GeoCheck, Lake County Land South Parcel*. Inquiry Number 3034575.2s. April 7, 2011.
- . 2011c. *EDR Radius Map Report with GeoCheck, Wolf Land Parcel 2*. Inquiry Number 3034618.2s. April 7, 2011.
- . 2011d. *EDR Radius Map Report with GeoCheck, Wolf Land Parcel 3*. Inquiry Number 3034628.2s. April 7, 2011.
- . 2011e. *EDR Radius Map Report with GeoCheck, Wolf Land Parcel 4*. Inquiry Number 3034643.2s. April 8, 2011.
- . 2011f. *EDR Radius Map Report with GeoCheck, Hunting Club Land*. Inquiry Number 3034656.2s. April 8, 2011.
- Environmental Resources Management (ERM). 2009. *Amphibole Mineral Fiber Toxicological Literature Review*. Prepared for: Minnesota Department of Natural Resources.

- . 2010. *Memorandum: NorthMet Mine Tailings Basin Cover Options Evaluation and Recommendations*. From ERM to NorthMet EIS Co-Lead Agencies Senior Management Team. December 30, 2010.
- . 2011a. *Detailed Scoping Report for the PolyMet Land Exchange*. Prepared for U.S.D.A Forest Service (USFS). May 2011.
- . 2011b. *Site Visit Notes. Hay Lake Lands, Hunting Club Lands, Lake County North, Lake County South, Wolf Lands, and McFarland Lake Lands*. R. Lisson and B. Gawtry (ERM). October 11 and 12, 2011.
- . 2012. *PolyMet EIS Mercury Issues Meeting Themes & Consultant Notes*. Notes MPCA Duluth Offices. July 10, 2012.
- . 2013. *NorthMet Mining Project GoldSim Water Quality Model -- Phase 3 Quality Assurance Memo*. February 25, 2013.
- Environmental Resources Management and Minnesota Department of Natural Resources (ERM and MDNR). 2011. *Analogue Information Relating to Mine Pit Cone of Depression Impacts on the Surficial Aquifer*. J.L. Adams (ERM) and M. Liljegren (MDNR). May 23, 2011.
- Erb, J. 2008. *Distribution and Abundance of Wolves in Minnesota, 2007-08*. Minnesota Department of Natural Resources.
- Erb, J. and S. Benson. 2004. *Distribution and Abundance of Wolves in Minnesota, 2003-04*.
- Erb, J. and B. Sampson. 2013. *Distribution and Abundance of Wolves in Minnesota, 2012-13*. Minnesota Department of Natural Resources, St. Paul.
- Essentia. See Essentia Health-Northern Pines Care Center.
- Essentia Health-Northern Pines Care Center (Essentia). *Find a Clinic/Hospital*. 2012. Accessed: May 9, 2012. Retrieved from: <http://www.essentiahealth.org/NorthernPinesCareCenter/FindaClinic/Essentia-HealthNorthern-Pines-Care-Center-37.aspx>
- Farvolden, R.N., O. Pfannkuch, R. Pearson, and P. Fritz. 1988. *Region 12, Precambrian Shield*. The Geology of North America, Volume O-2, Hydrogeology. W. Back, J.S. Rosenshein, and P. R. Seaber, eds. Geological Society of America.
- Fitzgerald, W.F. and T.W. Clarkson. 1991. Mercury and Methylmercury: Present and Future Concerns. *Environmental Health Perspectives*, 96,159-166.
- Flottec, LLC. 2009. *Material Safety Data Sheet: Flottec PAX Collector*. Revision No 3. November 1, 2009.
- Foose, Michael P. and Roger W. Cooper. 1978. *Preliminary Geologic Report on the Harris Lake Area, Northeastern Minnesota U.S. Geological Survey*. Minnesota Geological Survey, St. Paul, Minnesota. Open-File Report 78-385. Retrieved from: <http://pubs.usgs.gov/of/1978/0385/report.pdf>
- . 1981. *Faulting and Fracturing in Part of the Duluth Complex, Northeastern Minnesota*. *Canadian Journal of Earth Sciences*, 18(4), 810-814.

- Forman, Richard and Lauren E. Alexander. 1998. *Road and Their Major Ecological Effects*. Annu. Rev. Ecol. Syst., 29, 207-31. Downloaded from arjournals.annualreviews.org
- Foster, M.E. and P.J. Huddleston. 1986. "Fracture Cleavage" in the Duluth Complex, Northeastern Minnesota. Geological Society of America Bulletin, 97(1), 85-96. doi: 10.1130/0016-7606(1986)97<85:FCITDC>2.0.CO;2
- Foth. See Foth Infrastructure & Environment, LLC.
- Foth Infrastructure & Environment, LLC (Foth). 2012. *Economic Assessment of Conceptual Underground Mining Option for the NorthMet Project*. Prepared by Theodore J. Bornhort, LLC, Subconsultant to Foth Infrastructure & Environment, LLC for PolyMet Mining, Inc. St. Paul, Minnesota. October 2012.
- . 2013. *Memorandum: PolyMet--Proposed SDEIS Financial Assurance Language*. To Brad Moore and Jon Cheery, PolyMet Mining, Inc., from Kris Baran, Curt Dungey, and Steve Donohue, Foth. March 11, 2013.
- Foth and Van Dyke. 1999. *Supplemental Site Specific Resource Information: PolyMet Mining Corporation, NorthMet 1999 Exploration Project*. Prepared for PolyMet Mining Corporation. Golden, CO. August 1999.
- Frelich, L. and P. Reich. 2009. *Wilderness Conservation in an Era of Global Warming and Invasive Species: a Case Study from Minnesota's Boundary Waters Canoe Area Wilderness*. Natural Areas Journal, 29(4).
- Freudenberg, W. and L. Wilson. 2002. *Mining the Data: Analyzing the Economic Implications of Mining for Nonmetropolitan Regions*. Sociological Inquiry, 72(4), Fall 2002.
- Fritz, S.K. and Frape, P. 1987. *Geochemical Trends for Groundwaters from the Canadian Shield*. Geological Association of Canada Special Paper 33, 19-38.
- Froese, R. & D. Pauly (eds.). 2011. *Cottus ricci, Spoonhead Sculpin*. FishBase. Accessed: January 27, 2012. Retrieved from: <http://www.fishbase.org/summary/speciessummary.php?id=4083>
- Fuller, A. and D. Harrison. 2005. *Influence of Partial Timber Harvesting on American Martens in North-Central Maine*. Journal of Wildlife Management, 69(2), 710-722.
- GLO. See Government Land Office.
- Galloway, M.E. and B.A. Branfireun. 2004. *Mercury Dynamics of a Temperate Forested Wetland*. Science of the Total Environment, 325, 239-254.
- Gamble, John F. and Graham W. Gibbs. 2008. *An Evaluation of the Risks of Lung Cancer and Mesothelioma from Exposure to Amphibole Cleavage Fragments*. Regulatory Toxicology and Pharmacology, 52(1), Supplement, S154-S156. October 2008. Retrieved from: <http://www.sciencedirect.com/science/article/pii/S0273230007001468>
- Gavin, K., MPCA. Personal Communication. Ambient Air Quality Data Request. October 8, 2011.
- Gibbon, G. and A. R. Woolworth. 1977. *An Archaeological and Historic Sites Survey of Voyageurs National Park, Minnesota*. Report on file at Minnesota Historical Society.

- Gilmour, C.C., E.A. Henry, and R. Mitchell. 1992. *Sulfate Stimulation of Mercury Methylation in Freshwater Sediments*. Environmental Science and Technology, 26, 2281.
- Goldade, C. M., J. A. Dechant, D. H. Johnson, A. L. Zimmerman, B. E. Jamison, J. O. Church, and B. R. Euliss. 2002. *Effects of Management Practices on Wetland Birds: Yellow Rail*. Jamestown, ND: Northern Prairie Wildlife Research Center.
- Golder Associates, Inc. (Golder). 2007. *RS49 - Stockpile Conceptual Design*. Draft-02. October 25, 2007.
- Goodyear, C.D., T.A. Edsall, D.M.O. Dempsey, G.D. Moss, and P.E. Polanski. 1982. *Atlas of the Spawning and Nursery Areas of Great Lakes Fishes, Volume II: Lake Superior*. FWS/OBS-82/52. Washington, DC.: U.S. Fish and Wildlife Service. September 1982.
- Government Land Office (GLO). 1873. *Field Notes of the Exterior and Subdivision Lines of Township No. 59 N Range 13 W of the 4th Principal Meridian*. Retrieved from: http://www.glorerecords.blm.gov/results/default.aspx?searchCriteria=type=survey|st=MN|cty=137|twp_nr=59|twp_dir=N|rng_nr=13|rng_dir=W|m=46
- Greenberg, A.M., and J. Morrison. 1982. *Group Identities in the Boreal Forest: The Origin of the Northern Ojibwa*. Ethnohistory, 29(2).
- Greenlee, J., USFS. Personal Communication. October 26, 2011.
- Guinn, J.E. 2004. *Bald Eagle Nest Site Selection and Productivity Related to Habitat and Human Presence in Minnesota*. Doctoral Dissertation, North Dakota State University. May 2004.
- Gylseth, B., T. Norseth, and V. Skaug. 1981. *Amphibole Fibers in a Taconite Mine and in the Lungs of the Miners*. American Journal of Industrial Medicine, 2, 175-184.
- Hall, S.P. 1987. *Fort Snelling, Colossus in the Wilderness*. St. Paul, MN: Minnesota Historical Society Press.
- Hall, B.D., V.L. St. Louis, K. R. Rolffhus, R.A. Bodaly, K.G. Beaty, M.J. Paterson, and K.A. Peech Cherewyk. 2005. *Impacts of Reservoir Creation on the Biogeochemical Cycling of Methyl Mercury and Total Mercury in Boreal Upland Forests*. Ecosystems, 8, 284-266. DOI: 10.1007/s10021-003-0094-3.
- Hamilton, Jennifer R. 2009. *Ceramic Types of Northeastern Minnesota*. Minnesota Archaeologist, 68, 131-141.
- Hanchett A.H. and Thomas Clark. 1865. *Report of the State Geologist: Physical Geography, Meterology, and Botany of the Northeastern District of Minnesota*. St. Paul, MN: Frederick Driscoll, Incidental Printer.
- Hansen, J., M. Sato, and R. Ruedy. 2013. *Global Temperature Update Through 2012*. January 15, 2013. Retrieved from: http://www.nasa.gov/pdf/719139main_2012_GISTEMP_summary.pdf
- Harmon, S.M., J.K. King, J.B. Gladden, G.T. Chandler, and L.A. Newman. 2004. *Methylmercury Formation in a Wetland Mesocosm Amended with Sulfate*. Environmental Science and Technology, 38, 650-658.

- Harrison, C., E. Redepenning, C. Hill, G. Rap, Jr., S. Aschenbrenner, J. Huber, and S. Mullolland. 1995. *The Paleo-Indian of Southern St. Louis County, Minnesota: The Reservoir Lake Complex*. University of Minnesota.
- Hatch, J.T., K.P. Schmidt, D.P. Siems, J.C. Underhill, R.A. Bellig, and R.A. Baker. 2003. *A New Distributional Checklist of Minnesota Fishes, with Comments on Historical Occurrence*. Accessed: January 27, 2012. Retrieved from: http://mnmas.org/sites/default/files/pages/Aug_2012/MN%20Fisheries.pdf
- Headwaters Economics. 2009. *Economic Profile System-Human Dimensions Toolkit*. Spreadsheet-based toolkit. Retrieved from: <http://headwaterseconomics.org/tools/eps-hdt>
- Heath, D.J. 2011. *Results of a September 2009 Freshwater Mussel (Mollusca:Bivalvia:Unionidae). Survey in the Partridge River near the Proposed NorthMet Mine Project, Northeastern Minnesota - Final*. Prepared for Barr Engineering Company Barr. August 2011.
- Hem, John D. 1992. *Study and Interpretation of the Chemical Characteristics of Natural Water*. U.S. Geological Survey, Water Supply Paper 2254. Retrieved from: <http://pubs.usgs.gov/wsp/wsp2254/html/pdf.html>
- Heutmaker, James G. and G.B. Morey. 1982. *Lineament Map, Hibbing Sheet*. From Minnesota Geological Survey Miscellaneous Map Series. M-49. Retrieved from: <http://conservancy.umn.edu/bitstream/59984/1/umn22428%5b1%5d.pdf>
- Heyes, A., T. R. Moore, J.W.M. Rudd, and J.J. Dugoua. 2000. *Methyl Mercury in Pristine and Impounded Boreal Peatlands, Experimental Lakes Area, Ontario*. Canadian Journal of Fisheries and Aquatic Sciences, 57(11), 2211-2222.
- Hibbing Taconite Company. 2000. *Voluntary Mercury Reduction Agreement. Hibbing Taconite Company*. December 20, 2000. Retrieved from: <http://www.pca.state.mn.us/index.php/view-document.html?gid=331>
- Hickerson, H. 1970. *The Chippewa and Their Neighbors: A Study in Ethnohistory*. New York: Holt, Rinehart and Winston.
- Hinck, P.J., Barr. Personal Communication. Tailings Basin Seepage Rates. July 8, 2009.
- Hohman Caine, Dr. Christie A. and Grant E. Goltz. 1995. *Brainerd Ware and the Early Woodland Dilemma*. Minnesota Archaeologist, 54.
- . 2006. *Phase I Archaeological Survey. Northmet Mine Impact Area, Polymet Mining, St. Louis County, Minnesota*. Prepared for Barr Engineering By Soils Consulting, January 2006.
- . 2008. *Phase I Archaeological Survey of Dunka Road Expansion and Substation and Phase II Archaeological Evaluation of Northmet Archaeological Site*. Northmet Mine Impact Area, Polymet Mining, St. Louis County, Minnesota. Prepared for Barr Engineering By Soils Consulting. January 2008.
- Holmstonm, R., MDNR. Personal Communication. SNA Location Request. April 9, 2012.

- Hoyt Lakes Planning Commission. 2010. *Hoyt Lakes Minnesota Zoning Ordinance*. July 27, 2010. Retrieved from: <http://www.hoytlakes.com/citygov/Zoning%20Ordinance/Zone%20Table%20Contents.htm>
- Hubbs, C. and K. Lagler. 2007. *Fishes of the Great Lakes Region*. Revised by G. R. Smith. Ann Arbor, MI: University of Michigan Press.
- H-Valley Chemical Inc. 2006. *Ferric Chloride MSDS*. September 21, 2006.
- HydroGeoLogic, Inc. 1996. *MODFLOW-SURFACT software Version 3.0. Overview: Installation, registration, and running procedures*. Herndon, VA. Retrieved from: <http://www.hglsoftware.com/Modflow.cfm>
- IDOT. See Illinois Department of Transportation.
- IHMM. See Institute of Hazardous Materials Management.
- Ilgren, E.B. 2004. *The biology of cleavage fragments: a brief synthesis and analysis of current knowledge*. *Indoor and Built Environment*, 13, 343-356.
- Illinois Department of Transportation (IDOT). 2011. *Highway Traffic Noise Assessment Manual*. June 2011. Retrieved from: <http://www.dot.il.gov/environment/HTNAMManual.pdf>
- IMPROVE. No date. *Interagency Monitoring of Protected Visual Environments (IMPROVE) Network Data*. Retrieved from: <http://vista.cira.colostate.edu/improve/>
- Institute of Hazardous Materials Management (IHMM). 2012. *What are Hazardous Materials*. Accessed: April 24, 2012. Retrieved from: http://www.ihmm.org/index.php?option=com_content&view=article&id=61&Itemid=161
- Jaako Poyry. See Jaako Poyry Consulting, Inc.
- Jaako Poyry Consulting, Inc. 1994. *Final Generic Environmental Impact Statement Study on Timber Harvesting and Forest Management in Minnesota*. Minnesota Environmental Quality Board: St. Paul, Minnesota. April 1994. Retrieved from: <http://iic.gis.umn.edu/download/geis/main/geismain.htm>
- Jannett, F.J. 1998. *Small Mammal Community Dynamics in Cook County, Minnesota*. Prepared for Natural Heritage and Nongame Research Program, Section of Ecological Services, MN Department of Natural Resources. April 25, 1998.
- Jennings, C.E. and W.K. Reynolds. 2005. *Surficial Geology of the Mesabi Iron Range, Minnesota*. Minnesota Geological Survey, Miscellaneous Map M-164, scale 1:100,000. Retrieved from: <http://www.geo.umn.edu/mgs/>
- Jeremiason D., Jeff, Daniel R. Engstrom, Edward B. Swain, Edward A. Nater, Brian M. Johnson, James E. Almendinger, Bruce A. Monson, and Randy K. Kolva. 2006. *Sulfate Addition Increases Methylmercury Production in an Experimental Wetland*. *Environ. Sci. Technol.*, 40, 3800-3806.
- Jiang, Hongming, Chun Yi Wu, and Todd Biewen. No Date. *Metals Emissions for Taconite Ore Processing Facilities in Minnesota*. Minnesota Pollution Control Agency. St. Paul, MN.
- Johnson, Elden. 1969. *Preliminary Notes on the Prehistoric Use of Wild Rice*. *Minnesota Archaeologist*, 30(2), 31-43.

- . 1991. *Ceramic Stratigraphy at the Creech Site 21 CA 14*. Minnesota Archaeologist, 50(1), 3-6.
- Johnson-Groh, C. 2004. *Botrychium (moonwort) Rare Plant Surveys for Polymet Project*. Prepared for Barr Engineering Company. Gustavus Adolphus College, Minnesota. September 2004.
- Joyal, L., MDNR. Personal Communication. NorthMet Rare/Listed Species Request. February 13, 2012.
- Judd, Laura. 2013. *Effects of mercury (Hg) and methylmercury (MeHg) on bald eagle (Haliaeetus leucocephalus) populations in the Great Lakes region*. Memo from Laura Judd to Minnesota DNR, NorthMet Project. February 5, 2013.
- Julig, P.J. 1988. *The Cummins Site Complex and Paleoindian Occupations in the Northwestern Lake Superior Region*. Ph.D. Thesis, University of Toronto.
- Julig, P.J., J.H. Mc Andrews, and W.C. Mahaney. 1990. *Geoarchaeology of the Cummins Site on the Beach of Proglacial Lake Minong, Lake Superior Basin, Canada*. In *Archaeological Geology of North America, Centennial Special Volume 4*, Geological Society of America, edited by Norman P. Lasca and Jack Donahue.
- Justin, M. and B. Thompson. 1995. *Roosevelt Lake Narrows Site Summary and Conclusions*. In *Archaeological Data Recovery at the Roosevelt Lake Narrows Site, Cass County, Minnesota*, edited by Michael Justin. Woodward-Clyde Report 93e209. Prepared for the Minnesota Department of Transportation. On file at the Minnesota State Historic Preservation Office.
- Kappler, Charles J. (ed.). 1904. *Indian Affairs: Laws and Treaties. Vol. II, Treaties. Treaty with the Chippewa, 1854. Sept. 30, 1854.10 Stats., 1109. Ratified Jan. 10, 1855. Proclaimed Jan. 29, 1855.* Washington: Government Printing Office. Retrieved from: <http://digital.library.okstate.edu/kappler/Vol2/treaties/chi0648.htm>
- Kaseloo, P. A. 2004. *Synthesis of Noise Effects on Wildlife Populations*. Publication No. FHWA-HEP-06-016. September 2004.
- Kaups, M. 1984. *Ojibwa Fisheries on St. Louis River, Minnesota: 1800-1835*. Journal of Cultural Geography, 5(1), 61-83. DOI: 10.1080/08873638409478562.
- Kearnie, K., Barr Engineering. Personal Communication. Vegetation Section. February 6, 2013.
- Ketz, K. Anne and Julie A. Kloss. 2004. *Cultural Resources Assessment for the Environmental Impact Statement Scoping Document*. PolyMet Mining Corporation. NorthMet Project, Hoyt Lakes, St. Louis County, Minnesota. September 2004.
- Krabbenhoft, D.P., C.C. Gilmour, J.M. Benoit, C.L. Babiarz, A.W. Andren, and J.P. Hurley. 1998. *Methyl mercury Dynamics in Littoral Sediments of a Temperate Seepage Lake*. Canadian Journal of Fisheries and Aquatic Sciences, 55(4), 835-844.
- Lamppa, M.G. 2004. *Minnesota's Iron County: Rich Ore, Rich Lives*. Duluth, MN: Lake Superior Port Cities, Inc.
- Lancaster, Daniel. 2009. *John Beargrease: Legend of Minnesota's North Shore*. Duluth, MN: Holy Cow Press.

- Larkin, R. P. 1994. *Effects of Military Noise on Wildlife: a Literature Review*. Champaign, IL: Center for Wildlife Ecology, Illinois Natural History Survey.
- Latady, William R. and Marybelle Isham. 2011. *Identification of Historic Properties of Traditional Religious and Cultural Significance to the Boise Forte Band in the PolyMet NorthMet Project Area of Potential Effect*. Prepared for PolyMet Mining Inc. January 2011. Tower, MN: Boise Forte Tribal Historic Preservation Office.
- League of Minnesota Cities. 2011. *Handbook for Minnesota Cities*. Accessed: October 6, 2011. Retrieved from: <http://www.lmc.org/page/1/resource-library.jsp?keywords=Handbook&handbook=on&alpha=true>.
- Lee, P. 2002. *Ecological Relationships of Wild Rice, Zizania spp. 10. Effects of Sediment and Among-Population Variations on Plant Density in Zizania palustris*. Canadian Journal of Botany, 80(12), 1283-1294. DOI: 10.1139/b02-118.
- Loesch, T. 1997. *Geomorphology of Minnesota*. University of Minnesota-Duluth, Minnesota Geological Survey, Minnesota Department of Natural Resources. DNR Data Deli-landfne2_sam.gif.
- . 1998. *LandSat-Based Land Use – Land Cover*. Minnesota Department of Natural Resources. DNR Data Deli – lulc_ic96ra3.
- Loftus, Michael K. 1969. *A Late Historic Period Chippewa Sugar Maple Camp*. Wisconsin Archaeologist, 58(1), 71-76.
- MCWRC. See Minnesota Cultivated Wild Rice Council.
- MDC. See Minnesota Department of Commerce.
- MDH. See Minnesota Department of Health.
- MDNR. See Minnesota Department of Natural Resources.
- MDNR and USACE. See Minnesota Department of Natural Resources and U.S. Army Corps of Engineers.
- MDOT. See Minnesota Department of Transportation.
- MDR. See Minnesota Department of Revenue.
- MFRC. See Minnesota Forest Resources Council.
- MGIO. See Minnesota Geospatial Information Office.
- MLMIC. See Minnesota Land Management Information Center.
- MNSCU. See Minnesota State Colleges & Universities.
- MN Rules. See Minnesota Administrative Rules.
- MPCA. See Minnesota Pollution Control Agency.
- MSHA. See Mine Safety and Health Administration.
- MSPA. See Minnesota State Planning Agency.

- Mahoney, James R., Patricia M. Irving, and John L. Malanchuk. 1988. *Plan and Schedule for NAPAP's 1989 and 1990 Assessment Reports*. JAPCA, 38(12), 1489-1496. DOI: 10.1080/08940630.1988.10466487
- Malik, R. and K. Bakken. 1993. *Archaeological Data Recovery at the Bradbury Brook Site, 21ML42, Mille Lacs County, Minnesota*. Bradbury Brook Data Recovery Project, Archaeology Department, Minnesota Historical Society, St. Paul. Report on file at the Minnesota State Historic Preservation Office. tDAR ID: 246428
- Marr, C. 2008. *Contaminants in Fish and Wildlife of Lynx Lake, Arizona*. U.S. Fish and Wildlife Service Region 2.
- Martin Marietta Materials. 2007. *Limestone MSDS 3600-02*. November 2007.
- Mason, Ronald J. 1981. *Great Lakes Archaeology*. Academic Press.
- Master, L.L., B.A. Stein, L.S. Kutner, and G.A. Hammerson. 2000. *Vanishing Assets: Conservation Status of U.S. Species*. In B.A. Stein, L.S. Kutner and J.A. Adams (eds.). *Precious Heritage: The Status of Biodiversity in the United States*. New York, NY: Oxford University Press.
- Mather, D. and J. Lindbeck. 2011. *Ch. 5: Culture History*. In Phase I, II, and III Archaeological Investigations at the 21ML 81 for the Garrison Kathio West Mille Lacs Lake Sanitary Sewer District Collection and Transmission System in Mille Lacs County, Minnesota. Volume I of III. Frank Florin Principal Investigator. Report on file at the Minnesota State Historic Preservation Office.
- McDonald, M.G. and A.W. Harbaugh. 1988. *A Modular Three-dimensional Finite-difference Ground-water Flow Model*. U.S. Geological Survey Techniques of Water-resources Investigations Report, Book 6, Ch. A1.
- McGranahan, D. 1999. *Natural Amenities Drive Rural Population Change*. Food and Rural Economics Division, Economic Research Service, U.S. Department of Agriculture. Agricultural Economic Report No. 781. Retrieved from: <http://www.ers.usda.gov/publications/aer-agricultural-economic-report/aer781.aspx>
- McKelvey, K.S., Y.K. Ortega, G.M. Koehler, K.B. Aubry, and J.D. Brittell, J.D. 2000. *Canada Lynx Habitat and Topographic Use Patterns in North Central Washington: A Reanalysis*. In Ruggiero, L.F., K.B. Aubry, S.W. Buskirk, G.M. Koehler, C.J. Krebs, K.S. McKelvey, and J.R. Squires. (eds.). *Ecology and Conservation of Lynx in the United States*, 307-336. Boulder, CO: University Press.
- Meeker, J., Joan Elias, and John Heim. 1993. *Plants Used by the Great Lakes Ojibwa*. Great Lakes Fish and Wildlife Commission.
- Merrit, R.W., & Cummins, K.W. 1996. *An Introduction to the Aquatic Insects of North America*. Third Edition. Dubuque, IA: Kendall/Hunt.
- Meyer, P., G. Erickson, D. Sahli, N. Groth, B. Smith, and V. Sathyaseelan. 2009. *Recommended Pond Design Criteria*. Document number: wq-wwtp5-53. December 2009. Retrieved from: <http://www.pca.state.mn.us/index.php/view-document.html?gid=11503>

- Michlovic, Michael. 1982. *Report on the Red River Archaeological Survey in Norman County, Minnesota*. The Minnesota Archaeologist, 41(2).
- Millette, J. 2006. *Asbestos: Risk Assessment, Epidemiology, and Health Effects*. Chapter 2: Asbestos Analysis Methods. J. Millette, 2006. Edited by Ronald F. Dodson, Ph.D. and Samuel P. Hammar, M.D. CRC Press.
- Mine Safety and Health Administration (MSHA). 2005. *Asbestos Exposure Limits: Proposed Rule 30 CFR Parts 56,57,and 71*. Federal Register 70(145), 43950-43989. Accessed: July 29, 2005. Retrieved from: <http://www.msha.gov/30cfr/0.0.HTM>
- Minesite Drainage Assessment Group. 2013. *The International Kinetic Database*. Accessed: March 21, 2013. Retrieved from: <http://mdag.com/ikd.html>
- Minnesota Administrative Rules. 2012a. *Chapter 7050, Waters of the State*. Accessed: March 2012. Retrieved from: <https://www.Revisor.mn.gov/rules/?id=7050&view=chapter&format=pdf>.
- . 2012b. *Chapter 7052, Lake Superior Basin Water Standards*. Accessed: March 2012. Retrieved from: <https://www.Revisor.mn.gov/rules/?id=7052&format=pdf>
- Minnesota Cultivated Wild Rice Council (MCWRC). 2012. *Useful Wild Rice Facts*. Accessed: March 30, 2012. Retrieved from: www.mnwildrice.org/facts.php
- Minnesota Department of Health (MDH). 2008. *Exposures to Commercial Asbestos in Northeastern Minnesota Iron Miners Who Developed Mesothelioma*. Minnesota Department of Health. November 2008.<http://www.health.state.mn.us/divs/hpcd/cdee/occhealth/documents/MinersReport112503.pdf>
- . 2011. *System Hospitals*. Accessed: May 9, 2012. Retrieved from: <http://www.health.state.mn.us/traumasystem/designatedhospitals.html>
- . 2013a. *County Well Index Online*. Retrieved from: <http://www.health.state.mn.us/divs/eh/cwi/>
- Minnesota Department of Natural Resources (MDNR). 1980. *DNR 24K Streams*. DNR Data Deli – [dnrstln3_sam.gif](http://www.dnr.state.mn.us/dnrstln3_sam.gif).
- . 1981. *Wyman Creek Survey Data*. Richard Thompson and Steve Hirsch, Field Team. St. Louis County, Minnesota. August 25, 26, 31, 1981.
- . 1995. *Fisheries Management Plan for the Minnesota Waters of Lake Superior*. Division of Fish and Wildlife, Section of Fisheries.
- . 1997. *Evaluation of Selected Potential Candidate Research Natural Areas as Representative of Ecological Landtype Associations on the Superior National Forest, Minnesota*. *Biological Report No. 58*. Minnesota Department of Natural Resources. December 1997.
- . 2003. *Wyman Creek Survey Data*. Andy Levar and Dale Anderson, Field Team. St. Louis County, Minnesota. June 9 – September 11, 2003.
- . 2004. *East Range Hydrology Project*. Final Report. Minnesota Department of Natural Resources, Region 2. Grand Rapids, Minnesota. March 2004.
- . 2005. *NorthMet Mine and Ore Processing Facilities Project Final Scoping Decision*. October 25, 2005.

- . 2006a. *Ecological Classification System*. Accessed: August 2011. Retrieved from:
<http://www.dnr.state.mn.us/ecs/index.html>
- . 2006b. *GAP Land Cover-Vector*. MDNR Data Deli. Accessed: August 2011.
- . 2006c. *Scientific and Natural Areas*. MDNR Data Deli. Accessed: August 2011.
- . 2006d. *Tomorrow's Habitat for the Wild & Rare*. An Action Plan for Minnesota Wildlife - Comprehensive Wildlife Conservation Strategy. Retrieved from:
<http://www.dnr.state.mn.us/cwcs/index.html>
- . 2007. *An Evaluation of the Ecological Significance of the Headwaters Site*. Minnesota County Biological Survey. March 2007.
- . 2007c. *Lake Information Report: Whitewater Lake*. Retrieved from:
<http://www.dnr.state.mn.us/lakefind/showreport.html?downum=69037600>
- . 2008a. *MCBS Sites of Biodiversity Significance*. MDNR Data Deli. Accessed: August 2011.
- . 2008b. *Native Plant Communities*. MDNR Data Deli. Accessed: August 2011.
- . 2008c. *Natural Wild Rice in Minnesota: A Wild Rice Study Document Submitted to the Minnesota Legislature by the Minnesota Department of Natural Resources*. February 15, 2008. Retrieved from: http://files.dnr.state.mn.us/fish_wildlife/wildlife/shallowlakes/natural-wild-rice-in-minnesota.pdf
- . 2009. *The Crossroads of Climate Change*. Minnesota Conservation Volunteer. Kathleen Weflenis, Editor in Chief. Retrieved from: <http://www.dnr.state.mn.us/volunteer/janfeb01/warming.html>
- . 2010. *1854 Treaty*. Accessed: December 14, 2012. Retrieved from:
http://www.dnr.state.mn.us/aboutdnr/laws_treaties/1854/index.html
- . 2010b. *St. Louis Moraines, Tamarack Lowlands, Nashwauk Uplands, and Littlefork-Vermilion Uplands Subsections, Subsection Forest Resource Management Plan (SFRMP), Strategic Direction and Stand Selection, Final*. Minnesota Department of Natural Resources, Division of Forestry. December 2010. Retrieved from:
<http://files.dnr.state.mn.us/forestry/subsection/north4/finalplan/n4chapter1.pdf>
- . 2010c. *Colby Lake Standard Lake Survey Report: Population Assessment*. MDNR Fisheries Management. Hoyt Lakes, Minnesota. July 12, 2010.
- . 2011a. *Ecological Classification System: Ecological Land Classification Hierarchy*. Accessed: March 5, 2012. Retrieved from: <http://www.dnr.state.mn.us/ecs/index.html>
- . 2011b. *Invasive Species*. Accessed: August 10, 2011. Retrieved from: <http://www.dnr.state.mn.us/invasives/index.html>
- . 2011c. *Lake Information Report: McFarland Lake*. Accessed: March 5, 2012. Retrieved from:
<http://www.dnr.state.mn.us/lakefind/showreport.html?downum=16002700>
- . 2011d. *Lake Information Report: Saganaga Lake*. Accessed: January 27, 2012. Retrieved from: <http://www.dnr.state.mn.us/lakefind/showreport.html?downum=16063300>

- . 2011e. *Laurentian Mixed Forest Province*. MDNR Ecological Classification System. Accessed: August 11, 2011. Retrieved from: <http://www.dnr.state.mn.us/ecs/212/index.html>
- . 2011f. *Laurentian Uplands Subsection*. MDNR Ecological Classification System. Accessed: August 11, 2011. Retrieved from: <http://www.dnr.state.mn.us/ecs/212Le/index.html>
- . 2011g. *MDNR Ecological Classification System*. Accessed: August 11, 2011. Retrieved from: <http://www.dnr.state.mn.us/ecs/index.html>
- . 2011h. *Minnesota County Biological Survey*. Accessed: September 21, 2011. Retrieved from: <http://www.dnr.state.mn.us/eco/mcbs/outcomes/index.html>
- . 2011i. *Nashwauk Uplands Subsection*. MDNR Ecological Classification System. Accessed: August 11, 2011. Retrieved from: <http://www.dnr.state.mn.us/ecs/212Lc/index.html>
- . 2011L. *Partridge River Watershed Winter 2010-2011*. Base Flow Analysis. June 2011.
- . 2011m. *Rare Species Guide*. Accessed: August 12 and 16, 2011. Retrieved from: <http://www.dnr.state.mn.us/rsg/profile.html>
- . 2011n. *Rare Species Guide: Chilostigma Itascae Species Profile*. Accessed: March 5, 2012. Retrieved from: <http://www.dnr.state.mn.us/rsg/profile.html?action=elementDetail&selectedElement=IITRIOF010>
- . 2011o. *Soudan Underground Mine State Park, Park Info*. Accessed: July 6, 2012 and September 18, 2012. Retrieved from: http://www.dnr.state.mn.us/state_parks/soudan_underground_mine/index.html
- . 2011p. *Taconite State Trail, Trail Description*. Accessed: January 12, 2012. Retrieved from: http://www.dnr.state.mn.us/state_trails/taconite/index.html
- . 2011r. *1854 Treaty - Legal History*. Accessed: April 30, 2012. Retrieved from: http://www.dnr.state.mn.us/aboutdnr/laws_treaties/1854/litigation.html
- . 2011s. *MDNR Letter of Approval RE: Watershed Mitigation Plan*. February 11, 2011. [Includes full copy of Perer Mitchell Pit Concept Mitigation Plan from May 2010].
- . 2012a. *Bear Head Lake State Park*. Accessed: September 18, 2012. Retrieved from: http://www.dnr.state.mn.us/state_parks/bear_head_lake/index.html
- . 2012b. *Iron Range OHVRA Frequently Asked Questions*. Accessed: September 18, 2012. Retrieved from: <http://www.dnr.state.mn.us/ohv/gilbert/faq.html>
- . 2012c. *LakeFinder*. Accessed: February 24, 2012. Retrieved from: <http://www.dnr.state.mn.us/lakefind/index.html>
- . 2012d. *Lynx Sightings in Minnesota*. Accessed: May 1, 2012. Retrieved from: http://www.dnr.state.mn.us/eco/nhnrp/research/lynx_sightings.html
- . 2012e. *Minnesota Department of Natural Resources Wolf Briefing*. January 5, 2012. Accessed: May 1, 2012. Retrieved from: http://files.dnr.state.mn.us/fish_wildlife/wildlife/wolves/wolfbrief.pdf

- . 2012f. *News Release: Construction begins at Minnesota's Newest State Park*. Accessed: September 18, 2012. Retrieved from: <http://news.dnr.state.mn.us/2012/08/03/construction-begins-at-minnesotas-newest-state-park/#more-9469>
- . 2012g. *Rare Species Guide, Cicindela denikei*. Accessed: May 1, 2012g. Retrieved from: <http://www.dnr.state.mn.us/rsg/profile.html?action=elementDetail&selectedElement=IICOL026M0>
- . 2012h. *Wild Rice (Zizania aquatica)*. Accessed: June 14, 2012. Retrieved from: http://www.dnr.state.mn.us/aquatic_plants/emergent_plants/wildrice.html
- . 2012i. *News Release: Limited Wolf Season Possible in 2012*. January 6, 2012.
- . 2012j. *Public Waters Inventory-Maps*. Retrieved from: http://www.dnr.state.mn.us/waters/watermgmt_section/pwi/maps.html
- . 2012k. *Watershed Assessment Tool: Riparian Connectivity*. Retrieved from: http://www.dnr.state.mn.us/watershed_tool/scores/conn_riparian.html
- . 2012l. *Watershed Assessment Tool: Aquatic Connectivity*. Retrieved from: http://www.dnr.state.mn.us/watershed_tool/scores/conn_aquatic.html
- . 2012m. *Whitewater Lake Standard Lake Survey Report: Population Assessment*. MDNR Fisheries Management. Hoyt Lakes, Minnesota. August 14, 2012.
- . 2013a. *Natural Heritage Information System Database*. Accessed: March 2013. Retrieved from: <http://www.dnr.state.mn.us/eco/nhnrp/nhis.html>
- . 2013b. *Bear Hunting. Numeric Averages Compiled August 2013 by ERM from Annual Harvest Reports for Years 2006 Through 2012*. Retrieved from: <http://www.dnr.state.mn.us/hunting/bear/index.html>
- . 2013c. *Deer Hunt Maps and Statistics. Numeric Averages Compiled August 2013 by ERM from Annual Deer Harvest Reports for Years 2006 Through 2012*. Retrieved from: http://www.dnr.state.mn.us/hunting/deer/maps_stats_archive.html
- . 2013d. *Moose Hunting. Numeric Averages Compiled August 2013 by ERM from Annual Harvest Reports for Years 2011 and 2012 and from the 2013 Aerial Moose Survey*. Retrieved from: <http://www.dnr.state.mn.us/hunting/moose/index.html>
- . 2013e. *Appropriation Permit Index Notes*. Retrieved from: http://files.dnr.state.mn.us/waters/watermgmt_section/appropriations/index-number-active.pdf
- . 2013f. *U.S. Steel Minntac Mine Extension Project Record of Decision*. April 11, 2013.
- . 2013g. *Correction to Barr 2008o, Table 10: Estimated Post-closure Streamflows along the Partridge River Based on XP-SWMM Model*. November 2013.
- . No Date (In Progress). *An Evaluation of the Ecological Significance of the Giants Range and Pike Peatlands Area*. Minnesota Biological Survey, Division of Ecological and Water Resources, MN Department of Natural Resources.

- Minnesota Department of Natural Resources and U.S. Army Corps of Engineers (MDNR and USACE). 2007. *Minnesota Steel Draft Environmental Impact Statement*. St. Paul, Minnesota. February 2007.
- . 2009. *NorthMet Project Draft Environmental Impact Statement. Volume I – Text and Tables*.
- . 2010. *Keetac Mine Expansion Project EIS*. Retrieved from: <http://www.dnr.state.mn.us/input/environmentalreview/keetac/index.html>
- Minnesota Department of Natural Resources, U.S. Army Corps of Engineers, U.S.D.A. Forest Service (MDNR et al.). 2011. *Impact Assessment Planning Summary Memos, NorthMet Project EIS*. Minnesota Department of Natural Resources, US Army Corps of Engineers, and US Forest Service.
- . 2013a. *NorthMet Project Underground Mining Alternative Assessment for the NorthMet Mining Project and Land Exchange Environmental Impact Statement*. September 27, 2013.
- . 2013b. *Interagency Memorandum: NorthMet Environmental Impact Statement Co-lead Agencies' Consideration of a West Pit Backfill Alternative*. April 11, 2013, with September 30, 2013, Addendum.
- Minnesota Department of Revenue (MDR). 2010. *Minnesota Sales and Use Tax Statistics, County by Industry Annual*. Accessed: May 9, 2012. Retrieved from: http://www.Revenue.state.mn.us/research_stats/Pages/2010-Sales-and-Use-Tax-Revenue-by-County.aspx
- . 2011. *Mining Tax Guide*. November 2011. Retrieved from: http://www.Revenue.state.mn.us/businesses/mineral/Documents/2011_mining_guide.pdf
- Minnesota Department of Transportation (MDOT). 2013. *Relocation of Hwy 53 Between Eveleth and Virginia, Project Schedule*. Retrieved from: <http://www.dot.state.mn.us/d1/projects/hwy53relocation/schedule.html>
- Minnesota Environmental Initiative. 2008. *Report on the Mercury TMDL Implementation Plan Stakeholder Process*. Prepared for the Minnesota Pollution Control Agency. CFMS Contract No. A99751. July 7, 2008. Retrieved from: <http://www.pca.state.mn.us/index.php/view-document.html?gid=11493>
- Minnesota Forest Resources Council (MFRC). 2003a. *Background Paper: Relationships Between Forest Spatial Patterns and Plant and Animal Species in Northern Minnesota*. Cynthia Lane, PH.D., Carolyn Carr, M.S., Ethan Perry, M.S., Ecological Strategies, LLC. Submitted to: Dr. Jim Manolis, Spatial Analysis Project Manager, MNDNR Contract # A45867. Minnesota Forest Resources Council Report LT-1203f. December 2003. Retrieved from: http://www.frc.state.mn.us/documents/council/MFRC_SpatialAnalysisProject_Patterns&Species_2003-12-01_Report.pdf

- . 2003b. *Changes in Forest Spatial Patterns from the 1930s to the Present in North Central and Northeastern Minnesota: An Analysis of Historic and Recent Air Photos*. George E. Host and Mark A. White, Natural Resources Research Institute, University of Minnesota, Duluth. Submitted: Dr. Jim Manolis, Spatial Analysis Project Manager, Contract # MDNR/A21767, For the Minnesota Forest Resources Council. Minnesota Forest Resources Council Report LT-1203c. December 2003. Retrieved from: http://www.frc.state.mn.us/documents/council/MFRC_Changes_Forest_Spatial_Patterns_NC&NE_MN_2003-12-01_Report.pdf
- Minnesota Historical Society. 2008. *History Topics: Merritt Brothers*. Retrieved February 15, 2008. Retrieved from: http://www.mnhs.org/library/tips/history_topics/126merritt.htm
- Minnesota Geospatial Information Office (MGIO). 2012. *Digital Elevation Model of Minnesota: Statewide 1:24,000-scale Raster*. Retrieved from: <http://www.mngeo.state.mn.us/chouse/metadata/dem24ras.html>
- Minnesota Land Management Information Center (MLMIC). 1983. *Minnesota Public Lands, 1983*. Retrieved from: http://www.lmic.state.mn.us/pdf/MN_Public_Lands_1983.pdf
- Minnesota Odonata Survey Project. 2012. *Species Proposed for Special Concern Status*. Retrieved from: <http://www.mndragonfly.org/dnrconcern.html>
- Minnesota Pollution Control Agency (MPCA). 1995. *Regional Groundwater Profile: Arrowhead Region*. Accessed: June 14, 2012. Retrieved from: <http://www.pca.state.mn.us/index.php/view-document.html?gid=6482>
- . 1999. *Baseline Water Quality of Minnesota's Principal Aquifers – Region 1, Northeastern Minnesota*. February 1999.
- . 1999b. *Technical Support Document for Air Emissions Permit No. 13700009-001, Issued to LTV Steel Mining Company*. April 1999.
- . 2003. *Minnesota Climate Change Action Plan: A Framework for Climate Change Action*. St. Paul, Minnesota.
- . 2005. *2005 Reduction Progress Report to the Legislature*. Minnesota Pollution Control Association. October 2005. Retrieved from: <http://www.pca.state.mn.us/index.php/view-document.html?gid=291>
- . 2006. *MPCA Strategy to Address Indirect Effects of Elevated Sulfate on Methylmercury Production and Phosphorus Availability*. October 19, 2006.
- . 2006b. *Minnesota's Impaired Waters and Total Maximum Daily Loads*. 2006 Data.
- . 2006c. *Review of Minnesota Power's Arrowhead Regional Emission Abatement (AREA) Project*. Minnesota Pollution Control Agency. January 17, 2006. Retrieved from: <http://www.pca.state.mn.us/index.php/view-document.html?gid=13468>
- . 2008. *A Guide to Noise Control in Minnesota. Acoustical Properties, Measurement, Analysis and Regulation*. October 2008.

- . 2008b. *Minnesota's Impaired Waters and Total Maximum Daily Loads*. 2008 Data. Retrieved from: <http://www.pca.state.mn.us/index.php/water/water-types-and-programs/minnesotas-impaired-waters-and-tmdls/maps-of-minnesotas-impaired-waters-and-tmdls.html>
- . 2009a. *Minnesota's Regional Haze SIP*. Retrieved from: <http://www.pca.state.mn.us/index.php/view-document.html?gid=2181>
- . 2009b. *Technical Support Document for the Minnesota State Implementation Plan for Regional Haze*. November 2009. Retrieved from: <http://www.pca.state.mn.us/index.php/view-document.html?gid=2184>
- . 2009d. *Implementation Plan for Minnesota's Statewide Mercury Total Maximum Daily Load*. Minnesota Pollution Control Agency. December 2009. Retrieved from: <http://www.pca.state.mn.us/index.php/view-document.html?gid=11481>
- . 2011a. *Draft Updated Staff Recommendation, St. Louis River – Partridge River to Cloquet*. March 28, 2011.
- . 2011b. *Draft Updated Staff Recommendation. Seasonal Application of Wild Rice Sulfate Standard - Partridge and Embarrass Rivers*. March 28, 2011.
- . 2011c. *EDA: Surface Water Environmental Data*. Accessed: January 27, 2012. Retrieved from: http://mpca.gis02.mpca.state.mn.us/eda_surfacewater/index.html
- . 2011d. *MPCA Staff Recommendation on Impact Criteria Related to the Permittability of the Proposed PolyMet Tailings Basin*. June 20, 2011.
- . 2011e. *Discussing Greenhouse Gas Emissions in Environmental Review*. St. Paul, Minnesota. December 2011. Retrieved from: <http://www.pca.state.mn.us/index.php/view-document.html?gid=12570>
- . 2012a. *Draft Staff Recommendation, Seasonal Application of the Wild Rice Sulfate Standard - Partridge River*. August 27, 2012.
- . 2012b. *Draft Staff Recommendation, Waters Used for the Production of Wild Rice - Partridge and Embarrass Rivers*. August 13, 2012.
- . 2012d. *WIMN: What's in My Neighborhood?* Accessed: April 30, 2012 and June 14, 2012. Retrieved from: <http://www.pca.state.mn.us/index.php/data/whats-in-my-neighborhood/index.html>
- . 2012e. *Guidance Manual for Assessing the Quality of Minnesota Surface Waters for Determination of Impairment: 305 b, Report and 303 d, List*. Retrieved from: <http://www.pca.state.mn.us/index.php/view-document.html?gid=16988>
- . 2012f. *Minnesota Criteria Pollutant Emission Inventory - Emission Sources*. Minnesota Pollution Control Association. Retrieved from: <http://www.pca.state.mn.us/index.php/air/air-monitoring-and-reporting/air-emissions-modeling-and-monitoring/criteria-air-pollutant-emission-inventory/emission-sources.html>

- . 2012g. Regional Haze State Implementation Plan Supplement. April 2012.
<http://www.pca.state.mn.us/index.php/view-document.html?gid=16991>
- . 2012h. Revised Guidelines for New and Modified Mercury Air Emissions Sources. December 6, 2012. Retrieved from: <http://www.pca.state.mn.us/index.php/topics/mercury/plan-to-reduce-mercury-releases-by-2025.html>
- . 2012j. *Air Emission Risk Analysis (AERA) – Guidance Updates: What’s New Archives*. Retrieved from: <http://www.pca.state.mn.us/index.php/air/air-monitoring-and-reporting/air-emissions-modeling-and-monitoring/air-emission-risk-analysis-aera/air-emissions-risk-analysis-aera-guidance-updates-whats-new-archives.html>
- . 2013a. *Water*. Retrieved from: <http://www.pca.state.mn.us/index.php/water/index.html>
- . 2013b. *Air Emissions Risk Analysis (AERA)*. Retrieved from: <http://www.pca.state.mn.us/mvrifb5>
- . 2013c. *St. Louis River Watershed Monitoring and Assessment Report*. Document number: wq-ws3-04010201b. Numerous authors and contributors. St. Paul, Minnesota. March 2013.
- . 2013d. *Annual Air Monitoring Network Plan for Minnesota – 2014*. St Paul, MN.
- . 2013e. Sources of Mercury Pollution and the Methylmercury Contamination of Fish in Minnesota. February 2013. <http://www.pca.state.mn.us/index.php/view-document.html?gid=288>
- Minnesota State Colleges & Universities (MNSCU). 2012. *Campus Locations*. Accessed: May 9, 2012. Retrieved from: <http://www.mnscu.edu/collegesearch/index.php/institution/>
- Minnesota State Planning Agency (MSPA). 1979. *Regional Copper-Nickel Study*. <http://www.leg.state.mn.us/docs/pre2003/other/792632.pdf>
- Mitchell, C. P. J., B. A. Branfireun, and R. K. Kolka. 2008. *Assessing Sulfate and Carbon Controls on Net Methylmercury Production in Peatlands: An in situ Mesocosm Approach*. *Applied Geochemistry*, 23, 503-518.
- Moen, R. 2009. *Canada Lynx in the Great Lakes Region - 2009 Annual Report*.
- . 2010. *Habitat and Road Use by Canada Lynx Making Long-Distance Movements*. NRRI Technical Report.
- Moen, R., G. Niemi, C.L. Burdett, and L.D. Mech. 2006. *Canada Lynx in the Great Lakes Region - 2005 Annual Report*. Prepared for USDA Forest Service, MN Cooperative Fish and Wildlife Research Unit, and MDNR.
- Montana Refining Company. 2011. *Sodium Hydrosulfide MSDS*. January 13, 2011.
- Morey, G. 1981. *Lineament Map, Two Harbors Sheet*. From Minnesota Geoplogical Survey Miscellaneous Map Series M45. Retrieved from: <http://conservancy.umn.edu/bitstream/59978/1/umn22424%5b1%5d.pdf>
- Mossman and Churg. 1998. *State-of-the-Art: Mechanisms in the Pathogenesis of Asbestosis and Silicosis*. *American Journal of Critical Care*, 157,1666-1680.

- Mowat, G., K.G. Poole, and M. O'Donoghue. 2000. *Ecology of Lynx in Northern Canada and Alaska*. In Ruggiero, L.F., K.B. Aubry, S.W. Buskirk, G.M. Koehler, C.J. Krebs, K.S. McKelvey, and J. R. Squires (eds.). *Ecology and Conservation of Lynx in the United States*. 265-306. Boulder, CO: University Press.
- Moyle, J.B. 1945. *Some Chemical Factors Influencing the Distribution of Aquatic Plants in Minnesota*. *American Midland Naturalist*, 34(2), 402-420.
- NADP. See National Atmospheric Deposition Program.
- NASA. See National Aeronautics and Space Administration.
- NCDC. See National Climatic Data Center.
- NCDENR. See North Carolina Department of Environment and Natural Resources.
- NIOSH. See U.S. Department of Health and Human Services National Institute for Occupational Safety and Health
- NOAA. See National Oceanic and Atmospheric Administration.
- NPS. See National Park Service.
- NTS. See Northeast Technical Services, Inc.
- Natural Heritage Information System (NHIS).
- National Aeronautics and Space Administration (NASA). 2008. *GISS Surface Temperature Trends: 2008 Summation*. December 16, 2008. Retrieved from: <http://data.giss.nasa.gov/gistemp/2008/>
- National Atmospheric Deposition Program (NADP). 2013. *NADP/MDN Monitoring Location MN16, Marcell Experimental Forest, Itasca County, Minnesota. Operation Data 1996 – Present*. Retrieved from: <http://nadp.sws.uiuc.edu/sites/siteinfo.asp?net=MDN&id=MN16>
- National Climatic Data Center (NCDC). 2010. *Climate of Minnesota*. Accessed: September 25, 2010. Retrieved from: <http://pbadupws.nrc.gov/docs/ML0833/ML083380322.pdf>
- National Oceanic and Atmospheric Administration (NOAA). 2007. *Climate At A Glance, Fall (Sep-Nov) Temperature Contiguous United States*. Retrieved from: <http://www.ncdc.noaa.gov/cag/>
- . 2013. *Technical Report NESDIS 142-3: Regional Climate Trends and Scenarios for the U.S. National Climate Assessment. Part 3. Climate of the Midwest*. Washington D.C.: January 2013. Retrieved from: http://www.nesdis.noaa.gov/technical_reports/NOAA_NESDIS_Tech_Report_142-3-Climature_of_the_Midwest_U.S.pdf
- National Park Service (NPS). 1990. *Episodic Acidification of Surface Waters Due to Acidic Deposition, Report 12. Acidic Deposition: State of Science and Technology*. P.J. Wigington, T.D. Davies, M. Tranter, K.N. Eshelman. Washington D. C. 1990: National Acid Precipitation Assessment Program (NAPAP).
- NatureServe. 2011. *Online Encyclopedia of Life, Version 7.1* [web application]. Arlington, VA. Accessed: August 19, 2011. Retrieved from: <http://www.natureserve.org/explorer/>

- . 2012. *NatureServe Explorer: Online Encyclopedia of Life, Version 7.1* [web application]. Arlington, VA. Accessed: May 1, 2012. Retrieved from: <http://www.natureserve.org/explorer>
- . 2013. *NatureServe Explorer: Western Moonwort (Botrychium hesperium)*. Arlington, Virginia. Accessed: July 12, 2013. Retrieved from: <http://www.natureserve.org/explorer/>
- Nelson, D. Personal Communication. Lake County Zoning Designations. October 10, 2011.
- Nesper, Larry, Anna Willow, and Thomas F. King. 2002. *The Mushgigagamongsebe District: A Traditional Cultural Landscape of the Sokaogon Ojibwe Community*. Report Compiled for the Sokaogon Community.
- Norrgard, R., G. Drotts, A. Drewes, and D. Dietz. 2007. *Minnesota Natural Wild Rice Harvesters Survey: A Study of Harvesters' Activities and Opinions*. December 2007. Retrieved from: http://files.dnr.state.mn.us/fish_wildlife/wildlife/wildrice/WildRiceHarvest-20080301.pdf
- North Carolina Department of Environment and Natural Resources (NCDENR). 2006. *Standard Operating Procedure Biological Monitoring: Stream Fish Community Assessment Program, Version 4*. August 1, 2006. Retrieved from: <http://www.esb.enr.state.nc.us/BAUwww/IBI%20Methods.2006.Final.pdf>
- Northeast Technical Services, Inc. (NTS). 2002. *Phase I - Environmental Site Assessment, Cliffs Erie Properties Including: The Hoyt Lakes Facility, Dunka Road Property, Taconite Harbor and Railroad Corridors*. Prepared for Cliffs Erie, LLC. September 2002.
- . 2009. *2008 Annual Report Hoyt Lakes Tailings Basin, Cliffs Erie LLC, NPDES/SDS Permit No. MN0054089*. January 2009.
- . 2010a. *Phase I Environmental Site Assessment, Cliffs Biwabik Ore Corporation Property Hay Lake*. Prepared for PolyMet Mining Corporation. June 2010.
- . 2010b. *Phase I Environmental Site Assessment, Wheaton College Property - McFarland Lake - Township 64N, Range 3E, Section 9*. Prepared for PolyMet Mining Corporation. June 2010.
- . 2011. *Test Pit Results and Waste Removal Summary for Cliffs Biwabik Ore Corporation Property Located Near Biwabik, Minnesota*. December 22, 2011.
- Northland Connection. 2012. *Regional Capacity and Public Safety Data*.
- Ohio EPA. See Ohio Environmental Protection Agency.
- Ohio Environmental Protection Agency (Ohio EPA). 1989. *Biological Criteria for the Protection of Aquatic Life: Volume III: Standardized Biological Field Sampling and Laboratory Methods for Assessing Fish and Macroinvertebrate Communities*. September 30, 1989. Retrieved from: http://epa.ohio.gov/portals/35/documents/BioCrit88_Vol3Sec5.pdf
- Ojakangas, Richard W. and Charles L. Matsch. 1982. *Minnesota's Geology*. University of Minnesota Press, Minneapolis, MN.

- Olcott, P.G. and D.I. Siegel. 1979. *Physiography and Surficial Geology of the Copper-Nickel Study Region, Northeastern Minnesota*. USGS Water-Resources Investigations 78-51, Open file Report, Prepared in Cooperation with Minnesota Environmental Quality Board.
- Old Bridge Chemicals, Inc. 1999. *Copper Sulfate MSDS*. March 16, 1999.
- Orehek, D., PolyMet. Personal Communication. NorthMet EIS: PINs Needed. April 17, 2012.
- Overstreet David F., and Michael F. Kolb. 2003. *Geoarchaeological Contexts for Late Pleistocene Archaeological Sites with Human-modified Woolly Mammoth Remains in Southeastern Wisconsin, U.S.A.* Geoarchaeology Special Issue: Paleoindian Geoarchaeology: Part II, 18(1). January 2003.
- PHMSA. See U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration.
- Palekar, L.D., C. M. Spooner, and D. L. Coffin. 1979. *Influence of Crystalline Habit of Minerals on in Vitro Cytotoxicity*. Annals of N.Y. Academy of Sciences, 330, 673-686.
- Peden, D.G. 1982. *Factors Associated with Growth of Wild Rice in Northern Saskatchewan*. Arctic, 35(2), 307-311.
- Pint, T., Barr. Personal Communication. NMet: Source for Number Updated per PolyMet Comment. August 9, 2013.
- Pint, T. and B. Dehler. 2008. *Technical Memorandum: PolyMet Tailings Basin Permeabilities*. August 28, 2009.
- PolyMet Mining (PolyMet). 2007. *ER05: NorthMet Project Preliminary SPCC Plan*.
- . 2007b. *PolyMet NorthMet Geology and Resource Background, August 2006 (Revised January 2007)*. PolyMet Project Description Support Document, ERO3, 82.
 - . 2008. *PolyMet Updates Capital and Operating Costs: Revised Construction Plans Reduce Pre-Revenue Capital Costs and time Line Project Development Update*. May 20, 2008. Retrieved from: <http://www.marketwire.com/press-release/polymet-updates-capital-and-operating-costs-amex-plm-858596.htm>
 - . 2011i. *NorthMet Project Wild Rice Mitigation, Sensitive Period Aspects, Version 1*. July 27, 2011.
 - . 2011m. *NorthMet Project Wetland Analysis Work Plan, Version 3*. Issue Date October 13, 2011. Report prepared for PolyMet Mining Company.
 - . 2012a. *NorthMet Project Geotechnical Data Package - Hydrometallurgical Residue Facility, Volume 2, Version 3*. October 12, 2012.
 - . 2012e. *NorthMet Project Residue Management Plan, Version 2*. December 14, 2012.
 - . 2012k. *PolyMet Mining, Job Opportunities – 2 and 4 Year Degrees*.
 - . 2012l. *PolyMet Mining, Job Opportunities – Construction/Mine Development Man-hours, 2012*.
 - . 2012n. *Reclamation Seeding and Mulching*. December 14, 2012.

- . 2012p. *NorthMet Project Geotechnical Data Package - Mine Site Stockpiles, Volume 3, Version 2*. May 29, 2012.
 - . 2012q. *NorthMet Project Air Quality Management Plan – Mine, Version 3*. December 14, 2012.
 - . 2012r. *NorthMet Project Air Quality Management Plan – Plant, Version 6*. December 21, 2012.
 - . 2012s. *NorthMet Project Rock and Overburden Management Plan, Version 5*. December 28, 2012.
 - . 2012t. *NorthMet Project Mine Plan, Version 2*. December 14, 2012.
 - . 2012u. *NorthMet Project Geotechnical Modeling Work Plan, Version 2*. March 8, 2012.
 - . Personal Communication. Annual Taxes Estimate. March 29, 2012.
 - . Personal Communication. NorthMet EIS: Light Pollution. July 25, 2012.
 - . 2013a. *NorthMet Project Reclamation Plan, Version 3*. January 22, 2013.
 - . 2013b. *NorthMet Project Wetland Data Package, Version 7*. March 1, 2013, with Updated Data Issued August 2, 2013.
 - . 2013c. *NorthMet Project Description, Version 5*. March 7, 2013.
 - . 2013e. *NorthMet Project Water Management Plan – Mine, Version 2*. January 9, 2013.
 - . 2013f. *NorthMet Project Water Management Plan – Plant, Version 2*. February 1, 2013.
 - . 2013g. *NorthMet Project Adaptive Water Management Plan, Version 5*. March 7, 2013.
 - . 2013h. *NorthMet Project Wetland Management Plan, Version 4*. Issue Date March 20, 2013. Report Prepared for PolyMet Mining Company.
 - . 2013i. *NorthMet Project Water Modeling Data Package, Volume 1 - Mine Site, Version 12*. March 8, 2013.
 - . 2013j. *NorthMet Project Water Modeling Data Package, Volume 2 - Plant Site, Version 9*. March 1, 2013.
 - . 2013l. *NorthMet Project Waste Characterization Data Package, Version 10*. March 7, 2013.
 - . 2013m. *NorthMet Project Flotation Tailings Management Plan, Version 3*. April 12, 2013.
 - . 2013n. *NorthMet Project Geotechnical Data Package - Flotation Tailings Basin, Volume 1, Version 4*. April 12, 2013.
 - . 2013o. *NorthMet Project Air Data Package, Version 4*. June 30, 2013.
 - . 2013q. *NorthMet Project Revised Wetland Permit Application, Version 1*. Issued August 19, 2013.
- Pomroy, D. and R. Barnes. 2004. *Rare Plant Survey at the PolyMet Mine 13l Site Located in T59N R13W*. Prepared for Barr Engineering Company. August 2004.

- Poole, K. 1994. *Characteristics of an Unharvested Lynx Population During a Snowshoe Hare Decline*. The Journal of Wildlife Management, 58(4), 608-618.
- Porterfield, J. and P. Ceas. 2008. *Minnesota State Wildlife Grants Program. Distribution, Abundance and Genetic Diversity of the Longear Sunfish (Lepomis megalotis) in Minnesota, with Determination of Important Populations*. Final Report. Prepared for Minnesota Department of Natural Resources MDNR. March 12, 2008.
- Powers, T.M. 2007. *The Economic Role of Mining in Minnesota: Past, Present, and Future*. Prepared for the Minnesota Center for Environmental Advocacy and the Sierra Club.
- Pratt, T.C. and N.E. Mandrak. 2007. *Abundance, Distribution and Identification of the Shortjaw Cisco (Coregonus zenithicus) in the Proposed Lake Superior Marine Protected Area*. Canadian Technical Report of Fisheries and Aquatic Sciences, 2697.
- Praxair Technology Inc. 2009a. *Carbon Dioxide, Refrigerated Liquid MSDS, P-4573-D*. December 2009.
- . 2009b. *Sulfur Dioxide MSDS, P-4665-F*. May 2009.
- Propst and Dawson. 2008. *State-designated Wilderness in the United States: A National Review*. International Journal of Wilderness, 14(1), 19-24. April 2008:
- Pylka, K., PolyMet. Personal Communication Hazardous Waste Management. October 19, 2011.
- . Personal Communication. NorthMet Inquiry Regarding the Plant Site Wastewater Treatment Facility. May 11, 2012.
- Rankin, E.T. 1989. *The Qualitative Habitat Evaluation Index QHEI : Rationale, Methods, and Applications*. Ohio EPA, Division of Water Quality Planning and Assessment, Ecological Analysis Section. November 6, 1989.
- Ray, Elden F. 2010. *Industrial Noise Series, Part IV, Modeling Sound Propagation*. June 16, 2010.
- Rhyne, R.W. 1994. *Hazardous Materials Transportation Risk Analysis: Quantitative Approaches for Truck and Train Industrial Health & Safety*. Wiley Publishing. July 15, 1994.
- Richter, B.D., J.V. Baumgartner, J. Powell, and D.P. Braun. 1996. *A Method for Assessing Hydrologic Alteration within Ecosystems*. Conservation Biology, 10(4), 1163-1174.
- . 1998. *A Spatial Assessment of Hydrologic Alteration within a River Network*. Regulated Rivers: Research & Management, 14, 329-340.
- Risjord, N.K. 2005. *A Popular History of Minnesota*. Minnesota Historical Society Press, St. Paul. Retrieved from: <http://www.worldcat.org/title/popular-history-of-minnesota/oclc/770722098/viewport>
- Robson, A. 2000. *Guideline to Analysis*. In Z.W. Kundzewicz & A. Robson (eds.). World Climate Programme - Water: Detecting Trend and Other Changes in Hydrological Data. WMO/TD, 1013, 11-14. Geneva: World Meteorological Organization. Retrieved from: <http://water.usgs.gov/osw/wcp-water/detecting-trend.pdf>
- Rosgen, D.L. 1996. *Applied River Morphology*. Pagosa Springs, CO: Wildland Hydrology.

- Rouleau, A., J. Guha, G. Archambault, and B. Abdelmounem. 2003. *An Overview of the Hydrogeology of the Precambrian Basement in Quebec and Related Mining Problems*. In *Groundwater in Fractured Rocks (2003)* IAH, Prague, Czech Republic; Krásný-Hrkal-Bruthans (eds.).
- SCS. See U.S.D.A. Soil Conservation Service.
- SHPO. See State Historic Preservation Office.
- SLCPD. See St. Louis County Patrol Division.
- Schaaf, Jeanne. 1978. *Cultural Resources Investigation at the Lake Winnibigoshish Dam Site—21 IC 4*. Archaeology Laboratory, Department of Anthropology, University of Minnesota. On file at Minnesota State Historic Preservation Office.
- Schram, S.T., J. Lindgren, and L.M. Evrard. 1999. *Reintroduction of Lake Sturgeon in the St. Louis River, Western Lake Superior*. *North American Journal of Fisheries Management* 19 (3), 815-823. DOI: 10.1577.
- Schuldt, N., Fond du Lac Environmental Program. Personal Communication. Federally Approved Water Quality Standards. March 6, 2012.
- Scott, W.B. and E. J. Crossman. 1973a. *Lake Sturgeon*. In *Freshwater Fishes of Canada*. Fisheries Research Board of Canada.
- . 1973b. *Northern brook lamprey*. In: *Freshwater Fishes of Canada*. Fisheries Research Board of Canada.
- . 1973c. *Shortjaw cisco*. In *Freshwater Fishes of Canada*. Fisheries Research Board of Canada.
- Selch, T.M., C.W. Hoagstrom, E.J. Weimer, J.P. Duehr, and S. R. Chipps. 2007. *Influence of Fluctuating Water Levels on Mercury Concentrations in Adult Walleye*. *Bulletin of Environmental Contamination and Toxicology*, 79, 36-40.
- Shay, Thomas C. 1971. *The Itasca Bison Kill Site, An Ecological Analysis*. Minnesota Prehistoric Archaeology Series. Minnesota Historical Society.
- Siegel, D.I. and S.W. Ericson. 1980. *Hydrology and Water Quality of the Copper-Nickel Study Region, Northeastern Minnesota*. U.S. Geological Survey, Water-Resources Investigations 80-739 Open-File Report. Retrieved from: <http://pubs.usgs.gov/of/1980/0739/report.pdf>
- Slough, B.G. and G. Mowat. 1996. *Lynx Population Dynamics in an Untrapped Refugium*. *The Journal of Wildlife Management*, 60(4), 946-961.
- Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.). 2007. *Climate Change 2007: The Physical Science Basis*. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.
- SRK. 2007a. *RS78 – Block Ore and Waste: Report on Mine Block Model PATELKE-MAR-02-2007*. Draft-01.
- . 2007b. *RS 53/42 – Waste Rock Characteristics/Waste Water Quality Modeling – Waste Rock and Lean Ore - NorthMet Project*. Draft 01. Prepared for PolyMet Mining Inc. March 9, 2007.

- . 2007c. *RS 54/46 – Waste Water Modeling – Tailings*. NorthMet Project. Draft 01. Prepared for PolyMet Mining Inc. July 20, 2007.
- St. Louis, V.L., J.W.M. Rudd, C.A. Kelly, K.G. Beaty, R.J. Flett, and N.T. Roulet. 1996. *Production and Loss of Methylmercury and Loss of Total Mercury from Boreal Forest Catchments Containing Different Types of Wetlands*. *Environmental Science and Technology*, 30, 2719-2729.
- St. Louis County. 2005. *St. Louis County Hazard Mitigation Plan*. April 2005.
- . 2011. *Online Zoning Information Database*. Accessed: May 1, 2012. Retrieved from: <http://www.stlouiscountymn.gov/LANDPROPERTY/BuildingZoning/Zoning.aspx>
- St. Louis County Patrol Division (SLCPD). 2012. *County Zoning and Information*. Accessed: May 21, 2012. Retrieved from: <http://www.stlouiscountymn.gov/LAWPUBLICSAFETY/LawEnforcement/Patrol.aspx>
- Stasiak, R. 2006. *Lake Chub (Couesius Plumbeus): A Technical Conservation Assessment*. Prepared for U.S.D.A. Forest Service, Rocky Mountain Region. May 4, 2006. Retrieved from: <http://www.fs.fed.us/r2/projects/scp/assessments/lakechub.pdf>
- State Historic Preservation Office (SHPO). 2007. *Archaeological Survey Report: Memorandums Between St. Paul USACE and Minnesota Historical Society, SHPO*. St. Paul, Minnesota. February and March 2007.
- State of Minnesota. 1985. *Report of the Administrative Law Judge: In the Matter of the Proposed Adoption of Minnesota Rules Parts 7000.4010 – 7005.4050, Relating to an Acid Deposition Standard and Control Plan*. For the Minnesota Pollution Control Agency, Acid Precipitation Program. PCA-85-002-AK, 6-2200-34-1.
- . 2009. *Minnesota Administrative Rules 4410.2300 content of EIS*. Retrieved from: <https://www.Revisor.mn.gov/rules/?id=4410.2300>
- . 2012. *Total State 2012-12 Operating Budget February 2012 Forecast. Minnesota Management & Budget*. Retrieved from: <http://www.beta.mmb.state.mn.us/doc/budget/report-pie/all-feb12.pdf>
- State of Minnesota v. Cliffs Erie, L.L.C. 2010. *Complaint and Consent Decree*. Ramsey County, MN, District Court, Second Judicial District. March 24, 2010.
- Steinbring, J. 1980. *An Introduction to Archaeology on the Winnipeg River*. Papers in Manitoba Archaeology Miscellaneous Paper 9. Department of Cultural Affairs and Historical Resources, Historic Resources Branch, Winnipeg.
- Stevenson, R. 1978. *Concentration of Mineral Fibers in Process Samples from Northeast Minnesota, Level I Report* (as cited in Barr, NorthMet Mine and Ore Processing Facilities Project: Fibers Data Related to the Processing of NorthMet Deposit Ore). St. Paul, MN: Minnesota Environmental Quality Board. November.
- Stoltman, James B. 1973. *The Laurel Culture in Minnesota*. Minnesota Prehistoric Archaeology Series No. 8. St. Paul, MN: Minnesota Historical Society.

- Sunde, P., S. Stener, and T. Kvam. 1998. *Tolerance to Humans of Resting Lynxes Lynx lynx in a Hunted Population*. *Wildlife Biology*, 4(3), 177-183.
- Suzuki, Y. and S. R. Yuen. 2002. *Asbestos Fiber Contributing to the Induction of Human Malignant Mesothelioma*. *Annals of the New York Academy of Sciences*, 982, 160-176, December 2002.
- Swain, E. et al. 1992. *Increasing Rates of Atmospheric Mercury Deposition in Midcontinental North America*. *Science*, 257, 5071.
- Sweet, Clyde W., Aaron Weiss, and Stephen J. Vermette. 1998. *Atmospheric Deposition of Track Metals at Three Sites Near the Great Lakes*. *Water, Air, and Soil Pollution*, 103, 423-439.
- TPL. See Trust for Public Land.
- Tanner, H. (ed.). 1986. *Atlas of Great Lakes Indian History*. Civilization of the American Indian Series, 174.
- . 1994. [Review of] *Powhatan Foreign Relations, 1500-1722*. *Virginia Magazine of History and Biography*, 102(1). January 1994.
- Teller, J. 1987. *Proglacial Lakes and the Southern Margin of the Laurentide Ice Sheet*. In: *North America and Adjacent Oceans During the Last Deglaciation*. Edited by W. F. Ruddiman and H.E. Wright Jr.
- Terrock Consulting Engineers. 2009. *Raeburn Quarry - Effects of Blasting, Terrock Blasting Report*. July 3, 2009.
- Thomas, M. and D. Mather. 1996. *The McKinstry Site 21KC1: Final Report of Phase III Investigation for Mn/DOT S.P. 3604-44, Replacement of the T.H. Bridge 5178 over the Little Fork River, Koochiching County, Minnesota*. Louchs Project Report 93512, Louchs and Associates, Inc.
- Trust for Public Land (TPL). 2012. *Wolf Island*. Retrieved from: <http://www.tpl.org/what-we-do/where-we-work/minnesota/wolf-island.html>
- Trygg, J.W. 1966. *Composite Maps of U.S. Land Surveyor's Original Plans and Field Notes*. Trygg Land Office. Ely, Minnesota.
- UNO. See United Nations Organization.
- US DOT. See U.S. Department of Transportation Federal Highway Administration.
- US FHWA. See U.S. Federal Highway Administration
- US Weather Bureau. See U.S. Department of Commerce Weather Bureau
- USACE. See U.S. Army Corps of Engineers.
- USDA. See U.S. Department of Agriculture.
- USDOE and MDC. See U.S. Department of Energy and Minnesota Department of Commerce.
- USEPA. See U.S. Environmental Protection Agency.
- USFS. See U.S.D.A. Forest Service.
- USFWS. See U.S. Fish and Wildlife Service.

USGS. See U.S. Geological Survey.

USGCRP. See United States Global Change Research Program.

UVGSDC. See University of Virginia Geospatial and Statistical Data Center.

USHR. See United States House of Representatives, 95th Congress.

U.S. Army Corps of Engineers (USACE). 1987. *Corps of Engineers Wetlands Delineation Manual*. Wetlands Research Program Technical Report Y-87-1 (online edition). Final, January 1987.

---. 2007. *Review of Archaeological Survey Report: Memorandums Between St. Paul USACE and Minnesota Historical Society, SHPO*. St. Paul, Minnesota. February and March 2007.

---. 2009. *St. Paul District Policy for Wetland Compensatory Mitigation in Minnesota*. January 23, 2009. Retrieved from: <http://www.mvp.usace.army.mil/Portals/57/docs/regulatory/MN-Special/Final%20St.%20Paul%20District%20Policy%20for%20Wetland%20Compensatory%20Mitigation%20in%20MNs.pdf>

---. 2013. *Draft Memorandum: Application of the Federal Mitigation Rule and St. Paul District Policy Guidance on Compensatory Mitigation – Compensation Ratios for Loss of Wetlands/Aquatic Resources*. May 29, 2013. St. Paul, Minnesota.

U.S. Army Corps of Engineers, Minnesota Department of Natural Resources, U.S.D.A. Forest Service, and PolyMet Mining, Inc. (USACE et al.). 2005. *Memorandum of Understanding for the Proposed PolyMet Mining, Inc. NorthMet Project in Northeastern Minnesota*.

U.S. Census Bureau. 1980. *Decennial Censuses*. Accessed: October 24, 2011. Retrieved from: <http://www.census.gov/prod/www/abs/decennial/>

---. 1990. *Decennial Censuses*. Accessed: October 24, 2011. Retrieved from: <http://www.census.gov/prod/www/abs/decennial/>

---. 2000. *Decennial Censuses*. Accessed: October 24, 2011. Retrieved from: <http://www.census.gov/prod/www/abs/decennial/>

---. 2009. *County Business Patterns for St. Louis, Cook, and Lake Counties, Minnesota*. Accessed: May 9, 2012. Retrieved from: <http://www.census.gov/econ/cbp>

---. 2010a. *American Community Survey 2006-2010 5-Year Estimates: Population and Housing Characteristics Based on Data Collected from January 1, 2006 to December 31, 2010*. <http://www.census.gov/acs/www/>

---. 2010b. *Decennial Censuses*. Accessed: October 24, 2011. Retrieved from: <http://www.census.gov/prod/www/abs/decennial/>

U.S. Department of Agriculture (USDA). 2012. *Minnesota Hydric Soils List*. Accessed: June 20, 2012. Retrieved from: ftp://ftp-fc.sc.egov.usda.gov/NSSC/Hydric_Soils/Lists/hydric_soils.xlsx

U.S. Department of Commerce Weather Bureau (US Weather Bureau). 1964. *Technical Paper No. 49: Two- to Ten-Day Precipitation for Return Periods of 2 to 100 Years in the Contiguous United States*. Prepared by John F. Miller. Washington, D.C.

- U.S. Department of Energy and Minnesota Department of Commerce and (USDOE and MDC). 2007. *Mesaba Energy Project, Draft Environmental Impact Statement, DOE/EIS-0382D, MN PUC Docket # E6472/GS-06-668*. November 2007.
http://energy.gov/sites/prod/files/Mesaba_DEIS_Summary.pdf
- . 2009. *Mesabe Energy Project, Final Environmental Impact Statement. DOE/EIS-0383, MN PUC Docket#E6472/GS-06-668*. November 2009. Retrieved from:
http://energy.gov/sites/prod/files/nepapub/nepa_documents/RedDont/EIS-0382-FEIS-01-2009.pdf
- U.S. Department of Health and Human Services National Institute for Occupational Safety and Health (NIOSH). 1985. *NIOSH Pocket Guide to Chemical Hazards*. Publication No. 85-114, September 1985. Accessed: January 2012 at:Retrieved from: <http://www.cdc.gov/niosh/npg/>
- . 1994. *Asbestos and Other Fibers by PCM. Issue 2*. August 15, 1994. Retrieved from:
<http://www.cdc.gov/niosh/docs/2003-154/pdfs/7400.pdf>
- U.S. Department of the Interior (DOI). 1998. *Guidelines for Evaluating And Documenting Traditional Cultural Properties*. National Register Bulletin 38. Contributing Authors Patricia L. Parker and Thomas F. King. Retrieved from: <http://www.nps.gov/nr/publications/bulletins/pdfs/nrb38.pdf>
- . 2012. *Payments in Lieu of Taxes*. Retrieved from: <http://www.doi.gov/pilt/index.cfm>
- U.S. Department of Justice (DOJ). 2007. *Massachusetts v. EPA, 549 U.S. 497, US Supreme Court Decision*. Retrieved from: <http://www.justice.gov/enrd/3589.htm>
- U.S. Department of Transportation Federal Highway Administration (US DOT). 2011. *Superior National Forest Scenic Byway*. Accessed: January 12, 2012. Retrieved from:
<http://byways.org/explore/byways/13552>
- U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration, Office of Hazardous Material Safety (PHMSA). 2012a. *All Incidents, 2002 through 2011*. February 8, 2012.
- . 2012b. *Bulk Incidents, 2002 through 2011*. February 8, 2012.
- U.S. Environmental Protection Agency (USEPA). 1974. *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety. 550/9-74-004*. March 1974. Retrieved from: <http://nepis.epa.gov>
- . 1993. *Risk Assessment Guidance for Superfund Volume 1: Human Health Evaluation Manual, Supplemental Guidance "Standard Default Exposure Factors," Interim Final*. Washington DC: Office of Emergency and Remedial Response, Toxics Integration Branch, March 1991. PB 91-9211314, OSWER DIRECTIVE: 9285.6-03.
- . 1997. *Mercury Study Report to Congress. Volume VII: Characterization of Human Health and Wildlife Risks from Mercury Exposure in the United States. EPA0-452/R-97-009*. December 1997.
- . 1999. *Title 40, Code of Federal Regulations, Part 51, Subpart P - Protection of Visibility, Section 51.302 Implementation Control Strategies for Reasonably Attributable Visibility Impairment*. Federal Register 35763, 35774, July 1, 1999.

- . 2003. *Guidance for Tracking Progress Under the Regional Haze Rule*. Contract No. 68-D-02-0261, Work Order No. 1-06. EPA-454/B-03-004. U.S Environmental Protection Agency, Office of Air Quality Planning and Standards Emissions, Monitoring and Analysis Division, Air Quality Trends and Analysis Group, Research Triangle Park, NC. September 2003. Retrieved from: <http://nepis.epa.gov/Adobe/PDF/P1006KM2.pdf>
- . 2004. *The Particle Pollution Report, Current Understanding of Air Quality and Emissions through 2003*. Contract No. 68-D-02-065, Work Assignment No. 2-01. EPA 454-R-04-002. U.S Environmental Protection Agency, Office of Air Quality Planning and Standards Emissions, Monitoring and Analysis Division, Air Quality Trends and Analysis Division, Research Triangle Park, NC. December 2004. Retrieved from: http://www.epa.gov/airtrends/aqtrnd04/pmreport03/report_2405.pdf
- . 2005. *Partition Coefficients for Metals in Surface Water, Soil, and Waste*. U.S. Environmental Protection Agency, Office of Research and Development. Document. Contributing Authors: Jerry D. Allison and Terry L. Allison. EPA/600/R-05/074. July 2005.
- . 2006. *Guidance on Systematic Planning Using the Data Quality Objectives Process*. EPA/240/B-06/001. February 2006. Retrieved from: <http://www.epa.gov/quality/qs-docs/g4-final.pdf>
- . 2008. *Integrated Risk Information System. Asbestos CASRN 1332-21-4*. Retrieved from: <http://www.epa.gov/iris/subst/0371.htm>
- . 2009. *Clarification on EPA-FLM Recommended Settings for CALMET*. USEPA Office of Air Quality Planning and Standards memorandum. August 31, 2009. Retrieved from: <http://www.epa.gov/ttn/scram/guidance/clarification/CALMET%20CLARIFICATION.pdf>
- . 2009b. *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities - Unified Guidance*. EPA 530/R-09-007. March 2009. Retrieved from: http://www.itrcweb.org/GSM_TechRegDraft/GWMC-HTML5/Content/Resources/Unified%20Guidance%202009.pdf
- . 2011a. *Aquatic Resource Monitoring - Terminology*. Accessed: January 27, 2012. Retrieved from: <http://www.epa.gov/nheerl/arm/terms.htm>
- . 2011b. *Biological Indicators of Watershed Health - Metrics and the Index of Biotic Integrity*. Accessed: January 27, 2012. Retrieved from: http://www.epa.gov/bioiweb1/html/ibi_metrics.html
- . 2011c. *Comments on the Technical Memorandum for Characterizing Uncertainty in the Mine Site Background Groundwater Data*. Memorandum E-19J, from Simon Manoyan, EPA Office of Enforcement and Compliance Assurance.
- . 2011d. *AirData*. Retrieved from: <http://www.epa.gov/airdata/index.html>

- . 2011e. *Toxicological Review of Libby Amphibole Asbestos in Support of Summary Information on the Integrated Risk Information System (IRIS)*. Retrieved from: <http://yosemite.epa.gov/sab/sabproduct.nsf/0/7639C111CC33A48A8525762E007A431A?OpenDocument>
- . 2012. *National Ambient Air Quality Standards NAAQS*. Updated October 2012. Retrieved from: <http://www.epa.gov/air/criteria.html>
- . 2012b. *Appendix C, Parts 1 and 2: Tolerance and Trophic Guilds of Selected Fish Species*. In *Rapid Bioassessment Protocols for Use in Streams and Wadeable Rivers: Periphyton, Benthic Macroinvertebrates, and Fish – Second Edition*. Michael T. Barbour, Jeroen Gerritsen, Blaine D. Snyder, and James B. Stribling (contributors). Accessed: July 18, 2013. Retrieved from: http://water.epa.gov/scitech/monitoring/rsl/bioassessment/app_c-1.cfm AND http://water.epa.gov/scitech/monitoring/rsl/bioassessment/app_c-2.cfm
- . 2013. *Draft Guidance for PM_{2.5} Permit Modeling*. Webinar Presented by George Bridgers and Roger Brode, OAQPS-AQAD-Air Quality Modeling Group. March 13, 2013. Retrieved from: http://www.epa.gov/scram001/webinar/Draft_PM25_Guidance/20130313_Draft_PM25_Guidance_Webinar.pdf
- U.S. Federal Highway Administration (US FHWA). 2011. *Highway Traffic Noise - Noise Effect on Wildlife*. Accessed: March 19, 2012. Retrieved from: http://www.fhwa.dot.gov/environment/noise/noise_effect_on_wildlife/effects/wild04.cfm
- U.S. Fish and Wildlife Service (USFWS). 2007. *National Bald Eagle Management Guidelines*.
- . 2009. *Questions and Answers Regarding the Revised Critical Habitat Designation for the Canada Lynx*.
- . 2011. *Ecological Services - Species of Concern*. Retrieved from: <http://www.fws.gov/midwest/es/soc/>
- . 2012. *Endangered Species in Minnesota*. Accessed: February 24, 2012. Retrieved from: <http://www.fws.gov/midwest/endangered/lists/minnesot-cty.html>
- . 2013. *Canada Lynx Incidental Take Data*. Provided by Tamara Smith, U.S. Fish and Wildlife Service, Twin Cities Field Office. Bloomington, Minnesota. July 2013.
- U.S. Geological Survey (USGS). 2001. *Some Facts about Asbestos*. March 2001. Retrieved from: <http://www.capcoa.org/Docs/noa/%5B12%5D%20USGS%20Facts%20on%20Asbestos.pdf>
- . 2008. *National Water Information System*. Accessed: April 24, 2012. Retrieved from: <http://nwis.waterdata.usgs.gov/nwis>
- . 2010. *Some Ecosystems Will Respond to Reductions in Mercury Emissions*. July 29, 2010. Retrieved from: http://toxics.usgs.gov/highlights/mercury_response.html
- U.S.D.A. Forest Service (USFS). 1982. *ROS Users Guide*.
- . 1990. *R-9 Cultural Resource Reconnaissance Report 9001013: Stubble Creek Timber Sale*.

- . 1995. *Landscape Aesthetics. A Handbook for Scenery Management*. Agriculture Handbook Number 701. December 1995. Retrieved from: http://library.Rawlingsforestry.com/fs/landscape_aesthetics/ah_701.pdf
- . 1997. *R-9 Cultural Resource Reconnaissance Report 9701004: 1997 Laurentian Projects*.
- . 2004a. *Final Environmental Impact Statement for Forest Plan Revision, Chippewa National Forest, Superior National Forest*. Milwaukee, WI. July 2004. Accessed: October 21, 2011 and January 9, 2012. Retrieved from: <http://www.fs.fed.us/r9/chippewa/plan/final/feis/index.shtml>
- . 2004b. *Land and Resource Management Plan*. Superior National Forest. July 2004. Retrieved from: <http://www.fs.fed.us/r9/chippewa/plan/final/snf/>
- . 2004c. *Superior National Forest Record of Decision. Final Environmental Impact Statement. To Accompany the Land and Resource Management Plan. R9-SU-FEIS-ROD*. July 2004. Retrieved from: http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fsm91_048973.pdf
- . 2007a. *Kawishiwi Ranger District, Superior National Forest. Appendix F: Glacier Project - Biological Evaluation of the Draft EIS. Region 9 Regional Forester Sensitive Species*. Retrieved from: http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fsm91_047981.pdf
- . 2007b. *National Visitor Use Monitoring Program Report*. Superior National Forest. January 2007. Retrieved from: http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5247896.pdf
- . 2007c. *USDA Forest Service Strategic Plan FY 2007-2012*.
- . 2008. *Endangered and Threatened Wildlife and Plants; Revised Critical Habitat for the Contiguous United States Distinct Population Segment of the Canada Lynx (*Lynx canadensis*) Proposed Rule*. Federal Register 73:40. February 28, 2008.
- . 2008b. *Technical Comments on Minnesota Regional Haze State Implementation Plan--Letter to Mr. David Thornton, Assistant Commissioner, MPCA, from Mr. James W. Sanders, Forest Supervisor*. Duluth, MN: United States Department of Agriculture, Forest Service, Superior National Forest.
- . 2009. *Superior National Forest Monitoring and Evaluation Report. Appendix B: LAU Habitat Summary - Existing Condition and Decisions Only*.
- . 2009b. *Idaho Cobalt Project*. Salmon-Challis National Forest-Projects. Retrieved from: <http://www.fs.usda.gov/detail/scnf/landmanagement/projects/?cid=stelprdb5309211>
- . 2009c. *Mineral Character Determination Related to Exchange of Lands Between PolyMet Mining and United States Forest Service*. July 17, 2009. Retrieved from: <http://www.fs.fed.us/nepa/fs-usda-pop.php/?project=33908>
- . 2010a. *USFS Invasive Plant Geodatabase*. Accessed: July 27, 2011. http://www.fs.fed.us/r3/gis/aps/invasive_plant.htm
- . 2010b. *USFS Management Indicator Habitat (MIH) Data*. Accessed: October 21, 2011.

- . 2010c. *R-9 Cultural Resource Reconnaissance Report 1101001: PolyMet Land Exchange/ACOE and SNF Survey.*
- . 2010d. *Toohey Project Biological Evaluation. Tofte Ranger District, Superior National Forest: Region 9 Forester Sensitive Plants.* Botanical Evaluation and Assessment. Prepared by Jack Greenlee. December 17, 2010.
- . 2011a. *Mineral Resource Exploration and Development. June 2011.* Retrieved from: http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5308167.pdf
- . 2011b. *PolyMet Land Exchange - Management Area Allocation of Proposed Nonfederal Lands.* Memo developed by James Sanders, Forest Supervisor on August 31, 2011.
- . 2011c. *PolyMet Land Exchange Indicator Analysis for Minerals/Title.* December 21, 2011.
- . 2011d. *Regional Forester Sensitive Plant Species for the Eastern Region.* List updated June 10, 2011. Accessed: January 9, 2012 and March 5, 2012.
- . 2011e. *Roads and Trails Data.*
- . 2011f. *Superior National Forest - Landscape Ecosystem Data.* Accessed: December 7, 2011.
- . 2011g. *Superior National Forest - Landscape Ecosystem Data.* Accessed: January 10, 2012.
- . 2011h. *Superior National Forest Candidate Research Natural Areas.* Accessed: January 12, 2012. Retrieved from: <http://nrs.fs.fed.us/rna/candidate/#MN>
- . 2011i. *USFS Forest Stand Data.* Accessed: October 21, 2011.
- . 2011j. *USFS Management Area Data.* Accessed: February 2012.
- . 2011k. *USFS Noxious Weed Layer Data.* Accessed: September 15, 2011.
- . 2011m. *South Fowl Lake Snowmobile Access Project, Final Environmental Impact Assessment Project, Forest Service Eastern Region, Superior National Forest, August 2011. Appendix B: NPS Natural Sounds and Night Skies Division Comments on the Noise Analysis in the USFS South Fowl Lake Snowmobile Access EIS.* Retrieved from: http://a123.g.akamai.net/7/123/11558/abc123/forestservic.download.akamai.com/11558/www/nepa/61161_FSPLT2_384377.pdf
- . 2012. *Visitor Use Report, Superior National Forest, National Visitor Use Monitoring Data Collected FY 2006.* April 20, 2012. Retrieved from: http://apps.fs.usda.gov/nrm/nvum/results/ReportCache/Rnd3_A09009_Master_Report.pdf
- . 2012b. *Federal Hardrock Mineral Prospecting Permits Record of Decision.*
- . 2012c. *MIH Patches 2012 Data. NorthMet Project.* Accessed: July 11, 2013.
- . 2012d. *MIH Patches 2020 Data. NorthMet Project.* Accessed: July 11, 2013.
- . 2013. *Canada Lynx, Northern Goshawk, and Great Grey Owl Shapefile Data.* Accessed: July 1 and July 10, 2013.

- U.S.D.A. Soil Conservation Service (SCS). 1975. *Getting the Most Out of Your Raindrop: Hydrology Guide for Minnesota*. St. Paul, MN: U.S.D.A. SCS. [NOTE: the true year of publication is unknown and listed as 197? in database/catalog records. 1975 has been chosen as a general publication time to allow for consistency in reference list organization.]
- United States Global Change Research Program (USGCRP). 2009. *Global Climate Change Impacts in the United States*. Thomas R. Karl, Jerry M. Melillo, and Tomas C. Peterson (eds.). United States Global Change Research Program. Cambridge University Press, New York, NY, USA.
- United States House of Representatives, 95th Congress. 1978. *Public Law 95-495. Boundary Waters Canoe Area Wilderness, Designation; Boundary Waters Canoe Area Mining Protection Area, Establishment*. Washington: GPO, October 21, 1978.
- United Nations Organization (UNO). 2012. *Hazard Class and Division*. Accessed: April 25, 2012. Retrieved from: <http://www.globalsecurity.org/military/systems/munitions/explosives-class.htm>
- University of Minnesota. 2013. *Taconite Workers Health Study*. Retrieved from: <http://taconiteworkers.umn.edu/about/index.html>
- University of Minnesota Duluth. 2011. *University of Minnesota Duluth Fall 2011 Facts*. Fall 2011 Accessed: May 9, 2012. Retrieved from: <http://www.d.umn.edu/facts/>
- University of Virginia Geospatial and Statistical Data Center (UVGSDC). 2008. *County Business Patterns*. Accessed: May 9, 2012. Retrieved from: <http://fisher.lib.virginia.edu/collections/stats/cbp/>
- URS. 2005. *Environmental Impact Statement for the McArthur River Mine Open Cut Project*. August 2005.
- IEWS. See Visibility Information Exchange Web System.
- Valppu, S. and George Rapp. 2000. *Paleoethnobotanical Context and Dating of the Laurel Use of Wild Rice: The Big Rice Site*. The Minnesota Archaeologist 59.
- Visibility Information Exchange Web System (IEWS) *Version 2.0*. Colorado State University. Retrieved from: <http://views.cira.colostate.edu/web/>
- Vogt, D. 2004. *Fish, Wild Game, and Plant Consumption Survey Results*. 1854 Treaty Authority. January 2004.
- WRCC. See Western Region Climate Center.
- Walker, David A. 1979. *Iron Frontier: The Discovery and Early Development of Minnesota's Three Ranges*. Minnesota Historical Society Press. St. Paul, Minnesota.
- Walton, G. 2004. *Rare Plant Species Survey: NorthMet Project*. Prepared for Barr Engineering Company and PolyMet Mining Corporation. August 2004.
- Ward, R.M.P. and C.J. Krebs. 1985. *Behavioral Responses of Lynx to Declining Snowshoe Hare Abundance*. Thesis, University of British Columbia. January 21, 1985.
- Warren, William W. 1984. *History of the Ojibway People*. Minnesota Historical Society Press.

- Watermark Numerical Computing. 2005. *PEST: Model-Independent Parameter Estimation*. User Manual, 5th Edition.
- Watkins, M. Personal Communication. VIC Files and PolyMet (Old LTV Tailings Basin). April 13, 2009.
- Watras, C.J., K.A. Morrison, O. Regnell, and T.K. Kratz. 2006. *The Methylmercury Cycle in Little Rock Lake During Experimental Acidification and Recovery*. *Limnology and Oceanography*, 51(1), 257-270.
- Watts, W.A. and T.C. Winter. 1966. *Plant Macrofossils from Kirchner Marsh, Minnesota – A Paleoecological Study*. *Geological Society of America Bulletin*, 77(12), 1339-1359.
- Webb, T., E.J. Cushing, and H. E. Wright, Jr. 1983. *Holocene changes in the vegetation of the Midwest*. In Wright, H.E. Jr., ed., *Late Quaternary Environments of the United States, Volume 2: The Holocene*, 142-145.
- Western Lime Corporation. 2009. *Lime MSDS*. June 2009.
- Western Region Climate Center (WRCC). 2012. *Minnesota – Monthly Average Number of Days Precipitation Greater Than or Equal to 0.01 inches*. Accessed: April 24, 2012. Retrieved from: http://www.wrcc.dri.edu/htmlfiles/M-N_compare.html
- Williams, J.E., E.J. Johnson, D.A. Hendrickson, S. Contreras-Balderas, J.D. Williams, M. Navarro-Mendoza, D.E. McAllister, and J.E. Deacon. 1989. *Fishes of North America Endangered, Threatened, or Of Special Concern: 1989*. *Fisheries*, 14(6), 2-20.
- Wilson, S., MDNR. Personal Communication. SNA Location Request. February 14, 2012.
- Wilson, J.A., & R.S. McKinley. 2005. *Distribution, Habitat, and Movements*. In G.T.O. LeBreton, F.W.H. Beamish and R.S. McKinley (eds.). *Sturgeons and Paddlefish of North America*, 40-72. Dordrecht, The Netherlands: Kluwer Academic Publishers.
- Wright, H.E., Jr. 1974. *The Environment of Early Man in the Great Lakes Region*. In: *Aspects of Upper Great Lakes Anthropology: Papers in Honor of Lloyd A. Wilford*. Edited by Lloyd A. Wilford and Elden Johnson.
- Zedeño, M. N., R.W. Stoffle, F. Pittaluga, G. Dewy-Hefley, R. Basaldú, and M. Proter. 2001. *Traditional Ojibway Resources in the Western Great Lakes: An Ethnographic Inventory in the States of Michigan, Minnesota, and Wisconsin*. Report prepared by Bureau of Applied Research in Anthropology, University of Arizona in Tucson for the National Park Service, Midwest Region.
- Zellie, Carole S. 2007. *Phase I Evaluation and Historic Context Study*. PolyMet Mining Corporation NorthMet Project Hoyt Lakes, St. Louis County Minnesota. Landscape Research Project No. 9-4.
- . 2012. *NorthMet Project Cultural Landscape Study*. Prepared for PolyMet Mining Inc. Hoyt Lakes, Minnesota. September 15, 2012.

-Page Intentionally Left Blank-

INDEX

1

1854 Ceded Territory, 1-10, 2-2, 3-1, 3-5, 3-6, 3-163, 4-3, 4-9, 4-269, 4-304, 4-306, 4-307, 4-308, 4-311, 4-313, 4-315, 4-340, 5-3, 5-321, 5-484, 5-490, 5-494, 5-508, 5-509, 5-577, 5-578, 5-587, 5-680, 6-90, 6-91, 6-95, 6-111, 6-128, 8-1
1854 Treaty Authority, 1-10, 4-3, 4-9, 4-32, 4-308, 4-309, 4-310, 4-311, 4-312, 4-313, 4-341, 5-21, 5-485, 5-486, 5-487, 5-488, 5-489, 8-1, 8-6, 8-10, 8-13, 8-14, 8-17, 8-20

A

aboveground storage tank, 1-17, 4-13, 4-14
Adaptive Water Management Plan, 3-16
Air Emissions Risk Analysis, 5-401, 5-404, 5-421, 5-424, 5-425, 5-431
air quality, 2-4, 2-7, 3-15, 3-173, 4-247, 4-251, 4-269, 4-353, 4-547, 5-395, 5-397, 5-398, 5-399, 5-400, 5-401, 5-402, 5-406, 5-407, 5-408, 5-409, 5-414, 5-428, 5-432, 5-434, 5-442, 5-502, 5-511, 5-513, 5-521, 5-523, 5-659, 6-63, 6-64, 6-69, 6-77, 6-84, 6-102, 6-104, 7-7, 7-9, 7-10, 7-11, 7-12, 8-18
emission control systems, 3-15, 3-99, 4-111, 5-395, 5-442, 5-482, 6-11, 6-75, 6-78, 7-7
monitoring, 3-15, 4-17, 4-74, 4-114, 4-126, 4-251, 5-46, 5-203, 5-335, 5-381, 5-407
permitting, 4-547
regulations, 4-247, 4-547
air quality standards
Minnesota Ambient Air Quality Standards (MAAQS), 4-247, 4-251, 5-396, 5-397, 5-400, 5-401, 5-406, 5-408, 5-411, 5-412, 5-413, 6-64, 6-69, 6-75
National Ambient Air Quality Standards (NAAQS), 4-247, 4-251, 5-395, 5-396, 5-397, 5-400, 5-401, 5-406, 5-407, 5-408, 5-410, 5-411, 5-412, 5-413, 5-420, 6-64, 6-67, 6-69, 6-71, 6-73, 6-75, 6-82
American Society for Testing and Materials (ASTM), 4-368, 4-385, 5-55
Ammonium Nitrate Fuel Oil Mixture (ANFO), 3-39, 3-41, 5-525, 5-528, 5-537
aquifers, 3-72, 4-24, 4-42, 4-43, 4-44, 4-45, 4-46, 4-47, 4-53, 4-54, 4-95, 4-99, 4-100, 4-103, 4-107,

4-111, 4-114, 4-149, 4-150, 4-151, 4-407, 4-409, 5-10, 5-13, 5-26, 5-27, 5-55, 5-69, 5-91, 5-92, 5-93, 5-102, 5-104, 5-114, 5-127, 5-135, 5-141, 5-154, 5-158, 5-159, 5-161, 5-177, 5-203, 5-219, 5-228, 5-229, 5-243, 5-283, 5-291, 5-307, 5-337, 6-24, 8-11
archaeological resources, 4-9, 4-295, 4-296, 4-303
archaeological sites, 4-255, 4-259, 4-264, 4-279, 4-283, 4-286, 4-290, 4-291, 4-295, 4-296, 4-298, 4-555, 5-457, 5-458, 5-461, 5-474, 5-475, 5-476, 5-481, 5-661, 5-671
archaeological surveys, 4-264, 4-303
artifacts, 4-286, 6-92, 6-93
Native American sites of cultural and religious significance, 4-304
traditional cultural properties, 4-262, 4-555, 5-673, 5-674
Area of Potential Effect, 4-262, 4-263, 4-264, 4-265, 4-269, 4-271, 4-273, 4-275, 4-277, 4-279, 4-281, 4-298, 4-299, 4-300, 4-303, 4-555, 5-370, 5-445, 5-479, 5-482, 5-525
Asbestos-Containing Materials, 3-127

B

Babbitt, City of, Minnesota, 1-5, 1-17, 3-6, 3-17, 3-154, 3-163, 4-3, 4-4, 4-9, 4-19, 4-116, 4-121, 4-122, 4-125, 4-150, 4-255, 4-315, 4-319, 4-320, 4-321, 4-322, 4-323, 4-328, 4-329, 4-330, 4-331, 4-335, 4-337, 4-338, 4-339, 4-345, 4-350, 4-358, 5-3, 5-161, 5-451, 5-452, 5-453, 5-457, 5-461, 5-464, 5-473, 5-474, 5-475, 5-476, 5-498, 5-504, 6-7, 6-8, 6-11, 6-13, 6-15, 6-21, 6-27, 6-32, 6-34, 6-38, 6-91, 6-101
bedrock, 3-2, 3-46, 3-52, 3-65, 3-117, 3-129, 3-149, 4-24, 4-43, 4-44, 4-45, 4-46, 4-53, 4-60, 4-61, 4-94, 4-95, 4-99, 4-103, 4-114, 4-149, 4-150, 4-151, 4-153, 4-155, 4-165, 4-166, 4-169, 4-174, 4-180, 4-295, 4-301, 4-367, 4-378, 4-383, 4-395, 4-396, 4-401, 4-402, 4-403, 4-407, 4-409, 4-410, 4-412, 4-486, 4-501, 4-509, 5-6, 5-10, 5-12, 5-26, 5-27, 5-33, 5-37, 5-38, 5-51, 5-55, 5-68, 5-81, 5-91, 5-92, 5-93, 5-97, 5-101, 5-102, 5-104, 5-106, 5-113, 5-114, 5-127, 5-131, 5-158, 5-159, 5-161,

5-169, 5-217, 5-219, 5-227, 5-243, 5-297, 5-319,
5-379, 5-448, 5-571, 8-10, 8-11, 8-12, 8-13
Best Available Control Technology, 5-395, 5-397,
5-400, 5-429, 5-432, 5-440, 5-441, 5-442, 6-7,
6-12, 6-81, 6-83, 6-84, 6-85
Best Management Practice, 5-360, 6-2
Bois Forte Band of Chippewa, 1-10, 4-9, 4-255,
4-261, 4-263, 4-297, 4-300, 4-304, 4-308, 4-313,
4-315, 4-319, 4-320, 4-321, 4-322, 4-323, 4-329,
4-330, 4-331, 4-335, 4-340, 4-341, 4-556, 5-484,
5-509, 5-674, 6-90, 8-1, 8-20
Boundary Waters Canoe Area Wilderness, 3-1,
3-159, 3-165, 4-4, 4-185, 4-255, 4-256, 4-259,
4-309, 4-315, 4-326, 4-327, 4-343, 4-354, 4-358,
4-359, 4-402, 4-403, 4-412, 4-503, 4-560, 4-567,
5-5, 5-366, 5-395, 5-398, 5-399, 5-413, 5-414,
5-415, 5-416, 5-417, 5-418, 5-419, 5-420, 5-421,
5-445, 5-448, 5-476, 5-502, 5-511, 5-512, 5-513,
5-514, 5-522, 5-523, 5-524, 5-631, 5-679, 6-15,
6-63, 6-76, 6-77, 6-78, 6-80, 6-82, 6-83, 6-85,
6-96, 6-101, 6-102, 6-103, 6-105, 6-109, 6-110,
6-129, 6-131, 7-7, 7-8, 7-9

C

CALPUFF, 5-407, 5-408, 5-415, 5-416, 5-418, 5-420
Candidate Research Natural Area, 4-357, 4-386,
4-391, 4-467, 4-473, 4-479, 4-567, 5-522, 5-579,
5-585, 5-588, 5-607, 5-610, 5-611, 5-618, 5-709,
6-103
carbon dioxide, 5-404, 5-525, 5-532, 7-5
carbon monoxide, 1-19, 1-20, 5-395, 5-399, 5-403,
5-406, 6-12
Cliffs Erie, LLC, 2-8, 3-3, 3-8, 3-13, 3-18, 3-43,
3-83, 3-87, 3-142, 4-3, 4-9, 4-10, 4-11, 4-12, 4-15,
4-16, 4-17, 4-61, 4-71, 4-72, 4-82, 4-90, 4-99,
4-109, 4-113, 4-121, 4-125, 4-126, 4-130, 4-166,
4-191, 4-314, 5-89, 5-153, 5-221, 5-285, 5-407,
5-408, 5-410, 5-412, 5-656, 6-9, 6-21, 6-24, 6-27,
6-30, 6-32, 6-64, 7-2, 7-4, 7-7, 8-14
climate change, 1-20, 2-7, 4-283, 4-471, 4-509, 5-78,
5-221, 5-222, 5-377, 5-404, 5-427, 5-428, 5-429,
5-430, 6-86, 6-87
Code of Federal Regulations, 1-9, 1-12, 1-13, 1-14,
1-16, 1-18, 2-8, 3-139, 3-140, 3-141, 3-159, 4-1,
4-202, 4-261, 4-262, 4-263, 4-303, 5-1, 5-12, 5-16,
5-18, 5-77, 5-313, 5-314, 5-401, 5-441, 5-479,
5-526, 5-527, 5-534, 5-538, 5-539, 5-540, 5-680,
6-1, 6-79, 6-80, 6-81, 6-86, 7-10, 7-12, 8-1, 8-2

Comprehensive Environmental Response,
Compensation, and Liability Act (CERCLA),
5-539
consultation
Section 106, 1-10, 1-16, 2-9, 4-261, 4-262, 4-263,
4-297, 5-479, 5-484, 5-485, 6-89, 6-93, 8-1
Section 7, 1-16, 2-9, 5-364, 7-2, 7-3, 7-10
tribal, 4-302, 4-304
Cook County, Minnesota, 3-165, 4-205, 4-315,
4-319, 4-320, 4-321, 4-322, 4-323, 4-324, 4-325,
4-328, 4-329, 4-330, 4-331, 4-334, 4-335, 4-402,
4-451, 4-503, 4-509, 5-585, 6-84, 6-109, 6-129,
6-131
Council on Environmental Quality (CEQ), 1-12,
1-13, 1-18, 3-5, 3-139, 3-140, 3-141, 5-497, 6-1,
6-2, 6-16, 6-17, 6-86, 7-12, 8-12, 8-19
cultural resources, 1-14, 1-18, 2-2, 2-4, 3-158, 4-255,
4-259, 4-261, 4-263, 4-264, 4-279, 4-290, 4-291,
4-295, 4-297, 4-298, 4-299, 4-305, 4-349, 4-354,
4-555, 4-556, 5-457, 5-461, 5-474, 5-475, 5-479,
5-480, 5-481, 5-490, 5-673, 5-674, 5-675, 6-89,
6-90, 6-92, 6-93, 6-94, 6-95, 7-10, 7-11, 7-12, 8-1
cultural and religious significance, 4-259, 4-261,
4-262, 4-263, 4-283, 4-297, 4-298, 4-300,
4-301, 4-303, 4-304, 4-555, 5-673, 6-91, 6-92,
6-93, 6-94

D

DDT (Dichlorodiphenyltrichloroethane), 4-204
drinking water, 4-24, 4-25, 4-336, 4-409, 5-10, 5-12,
5-16, 5-18, 5-114, 5-145, 5-147, 5-150, 5-442,
5-506, 5-507
Duluth Complex, 3-33, 3-40, 4-43, 4-44, 4-45, 4-46,
4-54, 4-60, 4-95, 4-149, 4-407, 4-408, 5-27, 5-33,
5-52, 5-92, 5-113, 5-161, 5-202, 5-434, 5-437,
5-438, 5-439, 5-440, 8-11
dust, 3-5, 3-38, 3-59, 3-66, 3-116, 3-124, 3-128,
3-129, 3-130, 3-151, 4-269, 5-224, 5-225, 5-226,
5-228, 5-229, 5-273, 5-274, 5-275, 5-276, 5-299,
5-300, 5-301, 5-302, 5-309, 5-339, 5-340, 5-342,
5-347, 5-348, 5-350, 5-351, 5-353, 5-357, 5-358,
5-369, 5-395, 5-400, 5-402, 5-416, 5-434, 5-436,
5-437, 5-442, 5-481, 5-483, 5-486, 5-487, 5-511,
5-528, 5-532, 6-2, 6-45, 8-8, 8-18
control of, 3-38, 3-66, 3-128, 3-130, 5-342, 5-357,
5-402, 5-434
fugitive, 3-15, 3-128, 4-269, 5-228, 5-273, 5-299,
5-302, 5-342, 5-353, 5-357, 5-358, 5-402,

5-403, 5-434, 5-440, 5-441, 5-517, 7-7, 7-10,
7-11, 8-18

E

easements

conservation, 5-318, 5-320, 5-323, 5-324, 5-326,
5-328

Ecological Classification System, 4-150, 4-174,

4-297, 4-305, 4-309, 4-310, 4-311, 5-486, 5-651

Ecological Land Type, 4-148, 4-150, 4-174, 4-467,

4-473, 4-480, 4-486, 4-488, 4-491, 4-493, 4-498,
4-500, 4-502, 4-505, 5-611, 5-619

economic activity, 1-14, 4-322, 4-323, 4-324, 4-325,
4-326, 4-327, 4-328, 4-329, 4-334, 4-557, 5-493,
5-494, 5-495, 5-497, 5-498, 5-499, 5-500, 5-501,
5-502, 5-504, 5-508, 5-509, 5-510, 5-677, 5-678,
5-681, 6-16, 6-95, 6-96, 6-99, 6-100, 6-128, 6-129

Embarrass River, 4-19, 4-25, 4-29, 4-32, 4-33, 4-37,
4-41, 4-42, 4-69, 4-94, 4-95, 4-99, 4-105, 4-114,
4-115, 4-116, 4-117, 4-119, 4-121, 4-122, 4-123,
4-125, 4-126, 4-130, 4-131, 4-132, 4-133, 4-149,
4-165, 4-197, 4-207, 4-213, 4-223, 4-228, 4-229,
4-234, 4-237, 4-238, 4-239, 4-241, 4-244, 4-245,
4-269, 4-310, 4-311, 4-313, 5-5, 5-6, 5-7, 5-8,
5-13, 5-15, 5-16, 5-19, 5-21, 5-26, 5-41, 5-45,
5-46, 5-47, 5-57, 5-68, 5-69, 5-78, 5-80, 5-81,
5-89, 5-114, 5-119, 5-157, 5-158, 5-159, 5-160,
5-165, 5-169, 5-174, 5-179, 5-180, 5-181, 5-182,
5-185, 5-188, 5-189, 5-190, 5-191, 5-193, 5-194,
5-195, 5-196, 5-199, 5-200, 5-205, 5-207, 5-209,
5-210, 5-220, 5-221, 5-222, 5-226, 5-298, 5-299,
5-311, 5-341, 5-368, 5-373, 5-379, 5-380, 5-383,
5-391, 5-392, 5-393, 5-394, 5-489, 5-490, 5-509,
5-656, 6-8, 6-9, 6-17, 6-18, 6-21, 6-26, 6-27, 6-28,
6-29, 6-31, 6-32, 6-33, 6-34, 6-35, 6-36, 6-38,
6-39, 6-40, 6-41, 6-42, 6-43, 6-59, 6-60, 6-61,
6-62, 7-4, 7-5, 8-4, 8-6, 8-7, 8-6, 8-7, 8-12, 8-14,
8-16

Emergency Response Plan, 5-539, 5-542

Endangered, Threatened, and Special Concern
Species

Federally listed species

mammals, 4-201, 4-202, 4-207, 4-208, 4-312,
4-512, 4-513, 4-514, 4-515, 4-516, 4-517,
4-518, 4-519, 4-520, 5-363, 5-364, 5-366,
5-367, 5-374, 5-625, 5-627, 5-630, 5-635,
5-636, 6-122, 6-123, 6-124, 7-6, 7-10

State-listed species

birds, 4-204, 4-205, 4-207, 4-208, 4-211, 4-313,
4-511, 4-512, 4-513, 4-515, 4-517, 4-519,
5-363, 5-368, 5-369, 5-375, 5-625, 5-632,
5-634, 5-636, 5-637, 6-110

insects, 4-205, 4-211, 4-511, 4-512, 4-515,
4-519, 5-363, 5-369, 5-625, 5-632, 5-637

mammals, 4-205, 4-208, 4-211, 4-515, 4-517,
4-519, 5-363, 5-369, 5-375, 5-625, 5-632,
5-634, 5-637

plants, 4-147, 4-179, 4-180, 4-181, 4-182,
4-184, 4-201, 4-203, 4-204, 4-210, 4-228,
4-308, 4-470, 4-471, 4-512, 4-514, 4-516,
4-518, 4-520, 5-350, 5-351, 6-45, 6-48, 6-50

engineering controls

containment systems, 3-2, 3-4, 3-7, 3-15, 3-16,
3-37, 3-38, 3-44, 3-45, 3-46, 3-51, 3-66, 3-72,
3-79, 3-115, 3-116, 3-117, 3-123, 3-129, 3-135,
3-137, 3-147, 3-148, 5-6, 5-7, 5-8, 5-45, 5-57,
5-62, 5-67, 5-68, 5-79, 5-80, 5-81, 5-82, 5-89,
5-93, 5-94, 5-97, 5-100, 5-101, 5-102, 5-105,
5-122, 5-123, 5-153, 5-154, 5-159, 5-161,
5-162, 5-165, 5-173, 5-174, 5-177, 5-178,
5-181, 5-189, 5-192, 5-195, 5-203, 5-206,
5-207, 5-208, 5-209, 5-210, 5-211, 5-212,
5-214, 5-215, 5-216, 5-217, 5-218, 5-220,
5-223, 5-225, 5-227, 5-228, 5-229, 5-285,
5-291, 5-297, 5-298, 5-299, 5-307, 5-311,
5-392, 5-541, 5-549, 5-555, 5-565, 5-570,
5-571, 5-575, 5-576, 6-32, 6-33, 6-59, 7-5

dikes, ditches, and ponds, 3-4, 3-13, 3-16, 3-47,
3-52, 3-71, 3-103, 3-117, 3-123, 3-129, 3-135,
4-16, 4-121, 4-179, 4-184, 4-470, 5-62, 5-80,
5-82, 5-98, 5-124, 5-153, 5-161, 5-205, 5-206,
5-212, 5-214, 5-215, 5-216, 5-217, 5-220,
5-229, 5-318, 5-319, 5-320, 5-321, 5-350,
5-358, 5-373, 5-476, 5-541, 5-562, 6-9, 6-23,
6-33, 6-47

Environmental Assessment Worksheet, 2-2, 5-424,
6-14, 6-85

Environmental Justice, 5-493, 5-494, 5-507, 5-508,
5-509, 5-677, 5-678, 5-680, 5-681, 6-101, 6-129

Environmental Quality Board, 1-13, 2-2, 2-3, 2-4

Erie Mining Company, 4-82, 4-290, 4-295, 4-296,
4-298, 4-299, 4-300, 4-301, 4-303, 5-479, 5-482,
6-94, 7-8

Executive Order, 1-15, 2-6, 3-159, 4-440, 5-507,
5-595, 5-598, 5-601, 7-5

F

Federal Land Managers, 4-247, 5-407, 6-79
financial assurance, 1-17, 2-9, 2-10, 3-16, 3-136,
3-137, 3-138, 3-139, 3-152, 4-11, 5-211, 5-213,
5-215, 5-314, 5-315, 5-316
fish
commercial, 4-24, 5-387, 6-61
fish passage, 5-642
habitat, 4-214, 4-215, 4-239, 4-448, 4-522, 4-526,
4-527, 4-531, 5-596, 5-600, 5-603, 5-655
rearing, 4-215
recreational, 5-431, 5-513, 8-5
spawning, 4-215, 4-234, 4-531, 5-380, 5-391,
5-653
species, 4-215, 4-245, 4-313, 4-526, 4-531, 4-541,
4-545, 5-489, 5-641, 5-646, 5-655, 6-59
Fond du Lac Band of Lake Superior Chippewa, 1-10,
4-3, 4-9, 4-234, 4-261, 4-263, 4-297, 4-302, 4-304,
4-308, 4-313, 4-315, 4-319, 4-320, 4-321, 4-322,
4-323, 4-329, 4-330, 4-331, 4-335, 4-339, 4-340,
4-556, 5-20, 5-484, 5-509, 5-674, 6-60, 6-90, 8-1,
8-4, 8-6, 8-9, 8-10, 8-12, 8-13, 8-14, 8-15, 8-17,
8-18, 8-19, 8-20
Forest Service Land Exchange Feasibility Analysis,
November 2009, 3-174, 4-395, 4-403

G

Grand Portage Band of Lake Superior Chippewa,
1-10, 4-9, 4-261, 4-263, 4-297, 4-302, 4-304,
4-308, 4-313, 4-315, 4-319, 4-320, 4-321, 4-322,
4-323, 4-329, 4-330, 4-331, 4-335, 4-340, 4-341,
4-556, 5-484, 5-509, 5-674, 6-90, 8-1, 8-4, 8-6,
8-9, 8-10, 8-11, 8-12, 8-13, 8-14, 8-15, 8-17, 8-18,
8-19, 8-20
Great Lakes Indian Fish & Wildlife Commission,
1-10, 4-308, 8-1, 8-4, 8-6, 8-7, 8-8, 8-9, 8-10,
8-11, 8-12, 8-13, 8-14, 8-15, 8-16, 8-18, 8-19,
8-19, 8-20
greenhouse gas, 5-398, 5-404, 5-405, 5-427, 5-428,
5-429, 5-430, 5-433, 5-434, 6-87
carbon dioxide, 5-404, 5-405, 5-427, 5-428, 5-430,
5-433
carbon dioxide equivalents, 5-404, 5-405, 5-406,
5-430, 5-433
methane, 5-404, 5-405, 5-428
nitrogen trifluoride, 5-428
nitrous oxide, 5-404, 5-405, 5-428

nitrous oxides, 1-19, 1-20, 5-399, 5-401, 5-403,
5-408, 5-409, 5-411, 5-416, 5-418, 5-434, 6-11,
6-12, 6-75, 6-77, 6-78, 6-79, 6-80, 6-81, 6-83,
6-84, 6-85, 6-86, 6-87
ozone, 4-251, 5-395, 5-406, 5-408, 5-428, 5-532,
6-82
sulfur hexafluoride, 5-428
water vapor, 6-103
groundwater, 1-17, 1-20, 2-5, 3-4, 3-5, 3-7, 3-13,
3-15, 3-16, 3-41, 3-44, 3-46, 3-51, 3-52, 3-59,
3-64, 3-65, 3-71, 3-72, 3-79, 3-116, 3-117, 3-119,
3-121, 3-123, 3-124, 3-129, 3-135, 3-137, 3-147,
3-148, 3-149, 3-151, 4-11, 4-12, 4-17, 4-19, 4-23,
4-24, 4-42, 4-43, 4-44, 4-45, 4-46, 4-47, 4-49,
4-51, 4-53, 4-54, 4-55, 4-57, 4-60, 4-61, 4-66,
4-72, 4-94, 4-95, 4-99, 4-103, 4-107, 4-108, 4-109,
4-110, 4-111, 4-112, 4-113, 4-114, 4-115, 4-122,
4-126, 4-147, 4-148, 4-149, 4-150, 4-151, 4-152,
4-153, 4-156, 4-165, 4-182, 4-269, 4-275, 4-277,
4-336, 4-407, 4-408, 4-409, 4-410, 4-411, 4-412,
4-435, 4-439, 5-5, 5-6, 5-7, 5-8, 5-9, 5-10, 5-11,
5-12, 5-13, 5-16, 5-25, 5-26, 5-27, 5-31, 5-33,
5-35, 5-37, 5-38, 5-41, 5-43, 5-45, 5-47, 5-54,
5-55, 5-56, 5-57, 5-62, 5-67, 5-68, 5-69, 5-77,
5-78, 5-79, 5-80, 5-81, 5-82, 5-89, 5-90, 5-91,
5-92, 5-93, 5-94, 5-97, 5-98, 5-100, 5-101, 5-102,
5-104, 5-105, 5-106, 5-107, 5-109, 5-111, 5-113,
5-114, 5-119, 5-121, 5-122, 5-123, 5-126, 5-127,
5-131, 5-135, 5-136, 5-137, 5-139, 5-141, 5-143,
5-144, 5-146, 5-147, 5-153, 5-154, 5-157, 5-158,
5-159, 5-160, 5-161, 5-162, 5-165, 5-167, 5-168,
5-169, 5-171, 5-173, 5-174, 5-177, 5-189, 5-191,
5-192, 5-195, 5-201, 5-202, 5-203, 5-204, 5-205,
5-207, 5-208, 5-209, 5-210, 5-212, 5-214, 5-215,
5-216, 5-217, 5-218, 5-219, 5-220, 5-221, 5-224,
5-225, 5-226, 5-227, 5-228, 5-229, 5-243, 5-244,
5-271, 5-272, 5-273, 5-283, 5-284, 5-291, 5-295,
5-297, 5-298, 5-299, 5-307, 5-308, 5-309, 5-310,
5-311, 5-316, 5-325, 5-334, 5-336, 5-337, 5-379,
5-380, 5-381, 5-392, 5-489, 5-522, 5-531, 5-543,
5-562, 5-565, 5-591, 5-592, 5-593, 6-9, 6-10, 6-11,
6-16, 6-23, 6-24, 6-29, 6-32, 6-33, 6-59, 6-62, 7-1,
7-4, 7-5, 8-1, 8-10, 8-10, 8-11, 8-12, 8-13, 8-14,
8-15
conditions, 5-41, 5-325
depth to, 3-65, 4-31, 4-46, 4-149, 4-236, 4-450,
4-463, 4-531

flow, 4-44, 4-45, 4-46, 4-53, 4-95, 4-99, 4-103,
4-149, 4-151, 4-410, 4-412, 5-26, 5-27, 5-33,
5-37, 5-38, 5-41, 5-45, 5-54, 5-55, 5-62, 5-68,
5-80, 5-91, 5-97, 5-105, 5-114, 5-119, 5-121,
5-122, 5-123, 5-135, 5-141, 5-162, 5-165,
5-173, 5-204, 5-215, 5-216, 5-228, 5-229,
5-283, 5-291, 5-297, 5-307, 5-308, 5-311, 6-9,
6-23, 6-29, 8-10
level, 4-46, 4-115, 5-9, 5-89, 5-90, 5-93, 5-158,
5-219, 5-271, 6-17, 8-14
quality, 3-151, 4-17, 4-42, 4-53, 4-107, 4-109,
4-113, 4-114, 4-408, 4-409, 4-411, 4-412, 5-10,
5-12, 5-47, 5-94, 5-98, 5-105, 5-143, 5-160,
5-168, 5-221, 5-283, 5-307, 5-308, 5-543,
5-592, 6-17
recharge, 4-61, 4-95, 4-156

H

habitat

aquatic habitat, 4-187, 4-476, 4-477, 4-484, 4-489,
4-500, 4-503, 4-510, 5-351, 5-379, 5-380,
5-381, 5-605, 5-609, 5-611, 5-614, 5-616,
5-619, 5-623, 5-625, 5-635, 5-639, 5-641,
5-642, 5-645, 5-646, 5-654, 6-16, 6-60, 6-61,
6-62, 6-123, 8-4
critical habitat, 4-202, 4-210, 4-512, 4-514, 4-516,
4-518, 4-520, 5-363, 5-364, 5-366, 5-367,
5-629, 5-630, 5-636, 6-122, 7-6
fragmentation of, 4-179, 4-471, 4-509, 5-226,
5-369, 5-622, 5-632, 5-637, 6-55
riparian habitat, 3-158, 4-208, 4-214, 4-219, 4-387,
4-436, 4-439, 4-522, 4-531, 5-379, 5-387,
5-610, 5-644, 5-653, 6-110
wildlife, 1-9, 1-14, 2-7, 3-5, 3-59, 3-124, 3-150,
4-156, 4-174, 4-435, 5-226, 5-339, 5-344,
5-371, 5-372, 5-373, 5-487, 5-488, 5-596,
5-600, 5-603, 5-635, 5-639, 6-3, 6-50, 6-51,
6-55, 6-59, 6-123, 7-6, 7-10, 7-11, 8-7
hazardous air pollutant (HAP), 5-395, 5-404
Hilsenhoff Biotic Index, 4-227, 4-243, 4-244, 4-526,
4-536, 5-650, 5-651, 5-655
housing, 4-315, 4-333, 4-335, 5-493, 5-494, 5-498,
5-499, 5-502, 5-504, 5-505, 5-508, 5-509, 5-678,
5-681, 6-16, 6-95, 6-96, 6-100
Hoyt Lakes, City of, Minnesota, 1-5, 1-11, 1-17, 2-2,
2-3, 3-87, 3-154, 4-3, 4-9, 4-10, 4-19, 4-24, 4-68,
4-72, 4-82, 4-85, 4-89, 4-255, 4-259, 4-260, 4-290,
4-315, 4-319, 4-320, 4-321, 4-322, 4-323, 4-328,

4-329, 4-330, 4-331, 4-335, 4-337, 4-338, 4-339,
4-344, 4-345, 4-350, 4-553, 5-3, 5-147, 5-150,
5-425, 5-442, 5-443, 5-452, 5-453, 5-464, 5-476,
5-498, 5-504, 6-3, 6-7, 6-9, 6-10, 6-11, 6-15, 6-21,
6-22, 6-23, 6-24, 6-25, 6-30, 6-31, 6-35, 6-37,
6-83, 6-84, 6-91, 6-101, 6-103

I

Index of Biotic Integrity, 4-29, 4-221, 4-226, 4-239,
4-241, 4-244, 4-526, 4-531, 4-535
Intergovernmental Panel on Climate Change (IPCC),
5-405, 5-427, 6-87
International Standards Organization (ISO), 5-445,
5-451, 5-452, 5-661

L

Land Type Association, 4-174, 4-467, 4-479, 4-480,
4-486, 4-488, 4-491, 4-493, 4-498, 4-500, 4-502,
4-505
land use
agriculture, 4-23, 4-219, 4-286, 4-302, 4-328,
4-387, 4-402, 5-427, 5-428, 5-644, 5-653
areas of concern, 4-10, 4-11, 4-12, 4-15, 4-113,
6-82
crops, 4-32, 4-61, 4-116, 4-170, 4-191, 4-198,
4-289, 4-305, 4-472, 4-478, 5-428, 5-632, 6-55,
6-119
forestry, 3-1, 4-4, 4-328, 4-387, 4-402, 4-557,
4-560, 5-579, 5-585, 5-677, 5-678, 5-680,
5-681, 5-692, 5-707, 6-13, 6-49, 6-50, 6-55,
6-58, 6-92, 6-93, 6-128
land ownership, 3-158, 3-159, 5-317, 5-319,
5-321, 5-629, 6-94, 6-111
private, 1-2, 2-3, 3-8, 3-157, 3-158, 3-163,
3-166, 3-173, 4-4, 4-9, 4-169, 4-259, 4-396,
4-397, 4-402, 4-479, 5-490, 5-511, 5-512,
5-577, 5-589, 5-591, 5-592, 5-629, 5-636,
5-639, 5-657, 5-661, 5-674, 5-675, 6-8, 6-15,
6-16, 6-44, 6-93, 6-101, 6-102, 6-105, 6-109,
6-129, 7-2
public, 1-14, 3-1, 3-8, 3-13, 3-157, 3-160, 4-4,
4-9, 4-315, 4-340, 4-343, 4-353, 4-474,
5-484, 5-511, 5-512, 5-513, 5-588, 5-629,
5-691, 5-699, 6-15, 6-101, 6-129, 6-131, 7-4
rangeland, 6-55
recreation, 1-14, 3-1, 3-158, 3-166, 4-4, 4-23,
4-24, 4-251, 4-325, 4-326, 4-327, 4-339, 4-343,
4-344, 4-353, 4-357, 4-359, 4-391, 4-395,

4-435, 4-441, 4-449, 4-560, 5-20, 5-447, 5-502,
5-505, 5-511, 5-512, 5-517, 5-518, 5-521,
5-522, 5-523, 5-585, 5-610, 5-678, 5-680,
5-683, 5-684, 5-703, 5-707, 5-709, 6-92, 6-96,
6-99, 6-101, 6-102, 6-128, 6-129, 6-130
regulations, 4-4, 4-9, 4-10, 4-385, 4-387, 4-391,
4-395, 4-396, 4-402, 5-3, 5-577, 5-578, 5-585,
5-589, 6-15
tribal land, 5-318
LTV Steel Mining Company, 1-1, 1-5, 1-11, 1-12,
2-3, 2-9, 3-2, 3-3, 3-4, 3-7, 3-8, 3-13, 3-16, 3-39,
3-83, 3-87, 3-91, 3-95, 3-102, 3-103, 3-114, 3-115,
3-116, 3-127, 3-130, 3-131, 3-148, 3-149, 3-157,
3-163, 4-3, 4-10, 4-11, 4-12, 4-17, 4-19, 4-37,
4-41, 4-42, 4-61, 4-73, 4-79, 4-82, 4-85, 4-90,
4-91, 4-95, 4-99, 4-103, 4-107, 4-109, 4-111,
4-112, 4-113, 4-122, 4-126, 4-127, 4-136, 4-139,
4-154, 4-158, 4-165, 4-168, 4-191, 4-193, 4-204,
4-207, 4-211, 4-212, 4-237, 4-238, 4-255, 4-279,
4-290, 4-295, 4-296, 4-311, 4-312, 4-350, 4-361,
4-363, 4-368, 4-369, 4-371, 4-372, 4-375, 4-376,
4-377, 4-378, 4-383, 4-384, 5-5, 5-41, 5-45, 5-62,
5-63, 5-67, 5-68, 5-78, 5-80, 5-81, 5-89, 5-120,
5-153, 5-158, 5-160, 5-161, 5-173, 5-189, 5-191,
5-192, 5-193, 5-205, 5-206, 5-212, 5-221, 5-284,
5-285, 5-291, 5-311, 5-353, 5-358, 5-359, 5-360,
5-373, 5-375, 5-377, 5-387, 5-394, 5-407, 5-410,
5-425, 5-426, 5-433, 5-452, 5-483, 5-485, 5-489,
5-499, 5-514, 5-517, 5-518, 5-545, 5-556, 5-557,
5-561, 5-562, 5-565, 5-569, 5-570, 5-571, 5-575,
5-576, 6-7, 6-9, 6-10, 6-17, 6-21, 6-22, 6-23, 6-24,
6-25, 6-26, 6-27, 6-29, 6-31, 6-32, 6-33, 6-36,
6-44, 6-51, 6-56, 6-61, 6-64, 6-90, 6-92, 6-105,
7-1, 7-2, 7-3, 7-4, 7-7, 7-10, 8-12, 8-13, 8-14, 8-17
Lynx Analysis Units, 4-202, 4-210, 4-512, 4-514,
4-516, 4-518, 4-520, 5-365, 5-627, 5-629, 5-630,
5-636, 6-122

M

Management Indicator Habitats, 4-183, 4-184, 4-185,
4-187, 4-189, 4-202, 4-204, 4-205, 4-207, 4-209,
4-215, 4-311, 4-312, 4-465, 4-467, 4-468, 4-472,
4-473, 4-474, 4-476, 4-477, 4-480, 4-481, 4-484,
4-486, 4-488, 4-489, 4-491, 4-493, 4-495, 4-498,
4-500, 4-502, 4-503, 4-505, 4-510, 4-511, 4-512,
4-513, 4-515, 4-517, 4-519, 4-521, 4-522, 4-525,
4-531, 4-541, 5-339, 5-351, 5-371, 5-488, 5-605,
5-607, 5-608, 5-611, 5-612, 5-613, 5-614, 5-616,

5-619, 5-620, 5-621, 5-623, 5-626, 5-632, 5-633,
5-637, 5-638, 5-641, 5-642, 5-652, 6-117, 6-118,
6-121, 6-123
mercury, 1-19, 1-20, 4-24, 4-29, 4-37, 4-42, 4-79,
4-86, 4-89, 4-127, 4-133, 4-213, 4-220, 4-236,
4-238, 4-245, 4-337, 4-340, 5-8, 5-20, 5-21, 5-201,
5-202, 5-203, 5-204, 5-205, 5-206, 5-207, 5-208,
5-210, 5-368, 5-373, 5-380, 5-388, 5-392, 5-395,
5-430, 5-431, 5-432, 5-489, 5-490, 5-509, 5-510,
6-3, 6-11, 6-18, 6-29, 6-30, 6-31, 6-32, 6-33, 6-34,
6-49, 6-59, 6-60, 6-62, 6-63, 6-84, 6-95, 6-101,
8-4, 8-5
Mesabi Iron Range, 1-5, 1-7, 3-1, 3-6, 3-33, 3-40,
3-163, 4-43, 4-174, 4-175, 4-180, 4-204, 4-259,
4-289, 4-301, 4-315, 4-344, 4-410, 4-447, 5-5,
5-92, 5-342, 5-373, 5-434, 5-496, 5-517, 6-15,
6-16, 6-44, 6-50, 6-56, 6-57, 6-90, 6-91, 6-92,
6-93, 6-94, 6-96, 6-99, 6-101, 6-102, 6-104
methymercury, 5-8, 5-20, 5-21, 5-201, 5-207, 5-208,
5-210, 6-29, 6-31, 6-32, 8-5
mining
copper, 1-1, 1-5, 1-11, 1-19, 1-20, 2-3, 3-1, 3-2,
3-4, 3-33, 3-87, 3-95, 3-99, 3-100, 3-101,
3-102, 3-111, 3-123, 4-43, 4-54, 4-74, 4-86,
4-93, 4-127, 4-207, 4-289, 4-409, 4-511, 4-513,
4-515, 4-517, 5-5, 5-10, 5-12, 5-18, 5-19, 5-51,
5-52, 5-55, 5-56, 5-69, 5-105, 5-106, 5-127,
5-131, 5-165, 5-182, 5-191, 5-211, 5-216,
5-374, 5-430, 5-500, 5-501, 5-532, 6-13, 6-14,
6-31, 7-1
hematite, 3-1, 4-289, 6-91
historic, 3-1, 3-6, 3-163, 4-4, 4-11, 4-12, 4-30,
4-32, 4-53, 4-68, 4-73, 4-99, 4-111, 4-261,
4-262, 4-263, 4-264, 4-269, 4-279, 4-283,
4-286, 4-290, 4-295, 4-296, 4-297, 4-298,
4-299, 4-300, 4-301, 4-302, 4-303, 4-353,
4-354, 4-358, 4-555, 5-3, 5-5, 5-13, 5-120,
5-317, 5-319, 5-376, 5-387, 5-479, 5-480,
5-481, 5-482, 5-484, 5-490, 5-521, 5-577,
5-673, 5-674, 6-30, 6-32, 6-59, 6-89, 6-90,
6-91, 6-92, 6-93, 6-94, 6-101, 6-103, 6-105, 8-1
iron ore, 3-1, 4-43, 4-289, 4-290, 4-359, 5-408,
5-439, 6-10, 6-13, 6-14, 6-24, 6-25, 6-91
nickel, 1-1, 1-5, 1-11, 1-19, 1-20, 2-3, 3-1, 3-2,
3-4, 3-7, 3-33, 3-87, 3-95, 3-99, 3-100, 3-101,
3-107, 3-112, 3-114, 3-116, 4-43, 4-54, 4-60,
4-93, 4-111, 4-409, 5-5, 5-19, 5-51, 5-55, 5-56,
5-61, 5-69, 5-105, 5-106, 5-131, 5-145, 5-155,

5-160, 5-165, 5-182, 5-191, 5-211, 5-216,
5-274, 5-300, 5-404, 5-421, 5-423, 5-424,
5-426, 5-430, 5-500, 6-13, 6-14, 6-31, 7-1
PGE, 1-1, 1-5, 2-3, 3-1, 3-2, 3-4, 3-7, 3-33, 3-87,
3-111, 3-123, 4-43, 5-5, 6-13, 7-1
taconite, 1-5, 1-11, 3-1, 3-2, 3-37, 3-44, 3-83,
3-87, 3-99, 3-115, 4-13, 4-15, 4-43, 4-191,
4-193, 4-289, 4-290, 4-296, 4-332, 4-344,
4-371, 4-378, 5-120, 5-161, 5-205, 5-206,
5-342, 5-387, 5-434, 5-436, 5-437, 5-438,
5-439, 5-482, 5-506, 6-8, 6-9, 6-10, 6-11, 6-12,
6-13, 6-14, 6-22, 6-25, 6-28, 6-31, 6-75, 6-77,
6-79, 6-84, 6-96
tailings, 1-1, 1-5, 3-3, 3-4, 3-16, 3-87, 3-91, 3-100,
3-102, 3-103, 3-114, 3-116, 3-129, 3-130,
3-131, 3-135, 3-148, 3-150, 3-151, 3-153,
3-154, 4-9, 4-10, 4-95, 4-99, 4-103, 4-107,
4-111, 4-126, 4-127, 4-168, 4-180, 4-181,
4-204, 4-300, 4-363, 4-368, 4-371, 4-375,
4-376, 4-378, 4-383, 5-5, 5-6, 5-8, 5-38, 5-41,
5-47, 5-57, 5-61, 5-62, 5-67, 5-81, 5-89, 5-158,
5-160, 5-161, 5-162, 5-173, 5-174, 5-181,
5-189, 5-190, 5-191, 5-204, 5-205, 5-206,
5-208, 5-212, 5-214, 5-217, 5-285, 5-300,
5-339, 5-348, 5-349, 5-356, 5-357, 5-358,
5-360, 5-373, 5-431, 5-438, 5-440, 5-441,
5-485, 5-557, 5-561, 5-562, 5-565, 5-567,
5-568, 5-571, 5-575, 6-9, 6-10, 6-28, 6-31,
6-33, 6-43, 6-56, 8-4, 8-12, 8-14, 8-17
Minnesota Routine Assessment Method, 4-148,
4-152, 4-156, 4-157, 4-174, 4-429, 4-434, 4-435,
4-441, 4-448, 4-451, 4-457, 4-461, 4-463, 4-466,
4-478, 4-522, 5-313, 5-597
Minnesota, State of
Department of Health (MDH), 1-10, 1-17, 4-109,
4-115, 4-213, 4-236, 4-245, 4-338, 5-10, 5-11,
5-12, 5-114, 5-423, 5-425, 5-426, 5-435, 5-438,
5-439, 5-440, 6-59
Department of Natural Resources (MDNR), 1-1,
1-9, 1-10, 1-12, 1-13, 1-15, 1-16, 1-18, 2-2, 2-3,
2-4, 2-5, 2-6, 2-8, 2-9, 2-10, 3-33, 3-37, 3-44,
3-45, 3-63, 3-72, 3-87, 3-103, 3-104, 3-115,
3-124, 3-127, 3-131, 3-136, 3-138, 3-139,
3-142, 3-147, 3-150, 3-151, 3-152, 3-153, 4-9,
4-11, 4-14, 4-23, 4-24, 4-27, 4-29, 4-30, 4-31,
4-46, 4-53, 4-60, 4-66, 4-67, 4-72, 4-82, 4-85,
4-100, 4-135, 4-148, 4-156, 4-169, 4-170,
4-173, 4-174, 4-176, 4-179, 4-180, 4-181,
4-182, 4-187, 4-191, 4-192, 4-193, 4-197,
4-198, 4-199, 4-201, 4-202, 4-203, 4-204,
4-205, 4-207, 4-210, 4-211, 4-219, 4-220,
4-221, 4-226, 4-233, 4-234, 4-235, 4-236,
4-237, 4-261, 4-286, 4-297, 4-305, 4-340,
4-357, 4-358, 4-359, 4-372, 4-391, 4-395,
4-403, 4-407, 4-409, 4-410, 4-411, 4-412,
4-429, 4-440, 4-465, 4-466, 4-467, 4-470,
4-471, 4-472, 4-473, 4-475, 4-476, 4-477,
4-478, 4-479, 4-483, 4-484, 4-485, 4-486,
4-487, 4-489, 4-490, 4-491, 4-492, 4-493,
4-497, 4-498, 4-499, 4-500, 4-501, 4-502,
4-503, 4-504, 4-505, 4-509, 4-510, 4-512,
4-513, 4-515, 4-517, 4-519, 4-527, 4-541,
4-545, 4-561, 5-14, 5-21, 5-52, 5-92, 5-120,
5-161, 5-174, 5-208, 5-213, 5-214, 5-215,
5-219, 5-228, 5-312, 5-314, 5-317, 5-323,
5-324, 5-325, 5-326, 5-335, 5-336, 5-337,
5-338, 5-339, 5-340, 5-341, 5-343, 5-345,
5-347, 5-348, 5-351, 5-352, 5-355, 5-356,
5-357, 5-358, 5-359, 5-363, 5-367, 5-368,
5-372, 5-374, 5-377, 5-379, 5-400, 5-403,
5-427, 5-436, 5-437, 5-438, 5-439, 5-457,
5-461, 5-485, 5-488, 5-545, 5-555, 5-568,
5-576, 5-580, 5-588, 5-591, 5-592, 5-605,
5-607, 5-608, 5-609, 5-615, 5-616, 5-617,
5-618, 5-622, 5-634, 5-645, 5-646, 5-651,
5-654, 6-3, 6-11, 6-12, 6-16, 6-17, 6-23, 6-34,
6-43, 6-45, 6-46, 6-47, 6-48, 6-49, 6-50, 6-51,
6-58, 6-64, 6-77, 6-84, 6-86, 6-87, 6-102,
6-103, 6-117, 6-121, 6-122, 6-124, 7-9, 7-12,
8-2, 8-9
Environmental Policy Act (MEPA), 1-9, 1-13,
1-16, 1-18, 2-2, 2-3, 2-8, 3-7, 3-139, 3-140,
3-141, 3-142, 3-149, 3-155, 5-430, 6-1, 6-25,
8-3, 8-12, 8-20
Pollution Control Agency (MPCA), 1-10, 1-15,
1-17, 2-4, 2-9, 3-103, 3-128, 3-142, 4-11, 4-12,
4-13, 4-14, 4-17, 4-24, 4-25, 4-29, 4-32, 4-33,
4-59, 4-60, 4-61, 4-72, 4-73, 4-76, 4-78, 4-87,
4-90, 4-93, 4-107, 4-109, 4-121, 4-122, 4-126,
4-130, 4-135, 4-173, 4-197, 4-214, 4-219,
4-220, 4-221, 4-226, 4-239, 4-241, 4-243,
4-244, 4-247, 4-251, 4-252, 4-253, 4-255,
4-256, 4-259, 4-340, 4-372, 4-385, 4-395,
4-396, 4-401, 4-402, 4-407, 4-408, 4-409,
4-440, 4-525, 4-526, 4-531, 4-535, 4-536,
4-541, 5-4, 5-5, 5-8, 5-12, 5-20, 5-21, 5-23,

- 5-25, 5-55, 5-105, 5-140, 5-193, 5-196, 5-208,
5-213, 5-214, 5-215, 5-219, 5-312, 5-316,
5-338, 5-358, 5-396, 5-397, 5-399, 5-400,
5-401, 5-405, 5-406, 5-407, 5-408, 5-409,
5-421, 5-422, 5-424, 5-425, 5-426, 5-427,
5-428, 5-429, 5-430, 5-431, 5-432, 5-438,
5-440, 5-443, 5-447, 5-457, 5-462, 5-473,
5-474, 5-475, 5-476, 5-527, 5-538, 5-545,
5-591, 5-592, 5-650, 5-651, 5-655, 6-9, 6-12,
6-18, 6-30, 6-31, 6-32, 6-34, 6-49, 6-62, 6-63,
6-65, 6-75, 6-76, 6-77, 6-78, 6-79, 6-82, 6-83,
6-84, 6-85, 6-86, 6-87, 6-88, 8-2, 8-6, 8-7, 8-6,
8-7
- Wetland Conservation Act (WCA), 1-15, 1-17,
4-135, 4-440, 5-312, 5-314, 5-315, 5-316,
5-317, 5-318, 5-322, 5-324, 5-326, 5-327,
5-328, 5-331, 5-338
- N**
- National Environmental Policy Act (NEPA), 1-9,
1-10, 1-12, 1-13, 1-16, 1-19, 2-2, 2-3, 2-6, 2-8,
3-7, 3-139, 3-140, 3-142, 3-165, 4-1, 4-261, 4-263,
4-305, 5-1, 5-77, 5-497, 6-1, 6-24, 6-25, 6-93,
6-99, 7-1, 7-10, 7-11, 8-3, 8-12, 8-16, 8-20
- National Hierarchy Framework of Ecological Units,
4-174, 4-305
- National Historic Preservation Act of 1966 (NHPA),
1-10, 1-16, 2-9, 4-261, 4-263, 4-279, 4-303, 4-556,
5-485, 5-673, 6-89, 6-92, 6-93
- National Pollutant Discharge Elimination System
(NPDES), 1-17, 2-9, 3-71, 4-11, 4-14, 4-16, 4-68,
4-69, 4-71, 4-83, 4-90, 4-99, 4-109, 4-121, 4-126,
5-77, 5-83, 5-122, 5-208, 5-217, 5-545, 5-656,
6-14, 6-22, 6-29, 8-6, 8-16
- National Pollutant Discharge Elimination System and
State Disposal System, 1-17, 2-9, 4-68, 4-90,
4-109, 4-121, 4-126, 5-83, 5-122, 5-217, 5-545,
5-656, 6-22, 8-6, 8-16
- National Register of Historic Places (NRHP), 4-261,
4-262, 4-263, 4-295, 4-296, 4-297, 4-298, 4-299,
4-300, 4-301, 4-302, 4-303, 4-555, 5-479, 5-480,
5-482, 5-483, 5-484, 6-89, 6-93, 6-94
eligible, 5-482, 5-680
- National Wetland Inventory (NWI), 4-139, 4-148,
4-441, 5-319, 5-709, 6-34, 6-37, 6-38, 6-39, 6-114,
6-115
- Native Americans
tribal land, 5-318
- tribes, 1-10, 4-3, 4-9, 4-234, 4-255, 4-261, 4-262,
4-263, 4-297, 4-300, 4-302, 4-304, 4-308,
4-313, 4-315, 4-319, 4-320, 4-321, 4-322,
4-323, 4-329, 4-330, 4-331, 4-335, 4-339,
4-340, 4-341, 4-556, 5-20, 5-484, 5-508, 5-509,
5-674, 6-60, 6-90, 8-1, 8-4, 8-6, 8-9, 8-10, 8-11,
8-12, 8-13, 8-14, 8-15, 8-17, 8-18, 8-19, 8-20
- natural gas, 5-423, 5-426, 5-431, 5-433
- natural hazards, 5-114, 5-120, 5-121, 5-428, 6-28
- Natural Heritage Information System (NHIS), 4-169,
4-176, 4-179, 4-187, 4-192, 4-199, 4-201, 4-204,
4-205, 4-209, 4-211, 4-470, 4-471, 4-477, 4-483,
4-489, 4-500, 4-503, 4-505, 4-510, 4-512, 4-514,
4-516, 4-518, 4-520, 5-339, 5-345, 5-347, 5-351,
5-355, 5-356, 5-359, 5-369, 5-374, 5-615, 5-622,
5-632, 5-637, 6-43, 6-45, 6-117, 6-121, 6-122,
6-124
- Natural Resources Conservation Service (NRCS),
4-148, 4-150
- nitrogen dioxide, 1-19, 1-20, 5-395, 5-398, 5-406,
5-407, 5-409, 5-410, 5-411, 5-412, 5-413, 5-414,
5-420, 5-421, 5-423, 5-424, 5-426, 6-49, 6-59,
6-69, 6-71, 6-75, 6-77, 6-82, 6-87
- nitrous oxides, 1-19, 1-20, 5-399, 5-401, 5-403,
5-408, 5-409, 5-411, 5-416, 5-418, 5-434, 6-11,
6-12, 6-75, 6-77, 6-78, 6-79, 6-80, 6-81, 6-83,
6-84, 6-85, 6-86, 6-87
- noise, 4-254, 4-255, 4-256, 4-259, 4-260, 4-279,
4-549, 4-553, 5-370, 5-445, 5-446, 5-447, 5-451,
5-452, 5-453, 5-462, 5-464, 5-465, 5-467, 5-469,
5-471, 5-473, 5-474, 5-475, 5-476, 5-487, 5-502,
5-521, 5-663, 5-665, 5-667, 5-669, 5-671, 5-672,
5-709, 7-11
- NorthMet Project
Documents
- Draft Environmental Impact Statement (DEIS)
November 2009, 1-1, 1-10, 1-14, 1-18, 2-1,
2-2, 2-3, 2-4, 2-5, 2-6, 2-7, 2-8, 3-1, 3-141,
3-142, 3-147, 3-148, 3-149, 3-150, 3-151,
3-153, 3-154, 3-155, 3-174, 4-1, 4-14, 4-42,
4-60, 4-103, 4-107, 4-115, 4-139, 4-214,
4-264, 5-6, 5-25, 5-26, 5-27, 5-56, 5-90,
5-120, 5-208, 5-210, 5-320, 5-347, 5-421,
5-424, 5-496, 5-615, 5-622, 6-14, 6-24, 6-78,
7-12, 8-1, 8-16
- Final Environmental Impact Statement (FEIS),
1-9, 1-13, 1-18, 2-1, 2-7, 2-8, 3-141, 4-169,
4-176, 4-192, 4-201, 4-213, 4-465, 4-470,

- 4-477, 4-506, 4-511, 4-521, 5-345, 5-354,
5-364, 5-367, 5-427, 5-605, 5-614, 5-622,
5-625, 5-641, 5-673, 5-680, 6-10, 6-24, 6-84,
7-12, 8-6, 8-20
- Final Scoping Decision Document (Final SDD),
2-2, 3-153, 5-408, 6-3, 6-16, 6-17, 6-64,
6-65, 6-77, 8-13
- financial assurance, 1-17, 2-9, 2-10, 3-16, 3-136,
3-137, 3-138, 3-139, 3-152, 4-11, 5-211, 5-213,
5-215, 5-314, 5-315, 5-316
- Mine Site
 - drilling and blasting, 3-2, 3-33, 3-38, 3-41,
3-142, 4-12, 4-43, 4-45, 4-254, 4-259, 4-260,
4-279, 4-295, 4-363, 4-367, 4-371, 4-395,
4-403, 4-553, 5-51, 5-52, 5-91, 5-114, 5-370,
5-402, 5-440, 5-445, 5-448, 5-449, 5-453,
5-454, 5-457, 5-458, 5-461, 5-462, 5-474,
5-475, 5-476, 5-525, 5-671, 5-672, 6-13, 7-1,
7-2, 8-11
 - equipment, 3-115, 5-434
 - features
 - Central Pit, 1-5, 3-2, 3-3, 3-17, 3-39, 3-40,
3-43, 3-44, 3-45, 3-46, 3-51, 3-52, 3-64,
3-65, 3-72, 3-147, 4-363, 5-91, 5-97,
5-124, 5-210, 5-233, 5-311, 5-343, 5-344,
5-372, 5-376
 - Central Pumping Station, 1-1, 3-3, 3-37,
3-52, 5-79, 5-102, 5-105, 5-123, 5-124,
5-212
 - combined East Central Pit, 3-17, 3-39, 3-40,
3-42, 3-45, 3-46, 3-59, 3-64, 3-65, 3-72,
5-342, 5-343
 - East Pit, 1-5, 3-2, 3-3, 3-4, 3-17, 3-33, 3-39,
3-40, 3-42, 3-43, 3-44, 3-45, 3-46, 3-47,
3-52, 3-53, 3-59, 3-64, 3-65, 3-71, 3-136,
3-137, 3-147, 4-363, 5-5, 5-6, 5-12, 5-13,
5-37, 5-56, 5-79, 5-81, 5-82, 5-83, 5-90,
5-91, 5-93, 5-94, 5-97, 5-98, 5-100, 5-101,
5-102, 5-103, 5-106, 5-109, 5-111, 5-113,
5-114, 5-122, 5-123, 5-124, 5-127, 5-135,
5-136, 5-141, 5-142, 5-144, 5-154, 5-157,
5-202, 5-203, 5-204, 5-210, 5-211, 5-213,
5-215, 5-233, 5-283, 5-284, 5-311, 5-342,
5-343, 5-358, 5-372, 5-376, 5-517, 5-546,
5-556, 7-11, 8-5
 - Overburden Storage and Laydown Area, 1-1,
5-204
 - Power Distribution System, 3-37
- Rail Transfer Hopper, 1-1, 3-13, 3-37, 3-38,
3-40, 3-41, 3-42, 3-43, 3-63, 3-83, 3-147,
5-98, 5-102, 5-123, 5-124, 5-144, 5-218,
5-342, 5-402, 5-449
- Treated Water Pipeline, 3-37, 3-80, 5-79,
5-123, 5-212, 5-218, 5-229
- Wastewater Treatment Facility (WWTF),
1-1, 3-2, 3-7, 3-13, 3-15, 3-16, 3-17, 3-37,
3-41, 3-42, 3-46, 3-47, 3-51, 3-52, 3-53,
3-64, 3-65, 3-66, 3-72, 3-79, 3-83, 3-111,
3-114, 3-123, 3-137, 3-147, 4-79, 5-6, 5-8,
5-12, 5-15, 5-37, 5-79, 5-80, 5-81, 5-82,
5-83, 5-89, 5-93, 5-94, 5-97, 5-98, 5-100,
5-101, 5-102, 5-104, 5-105, 5-106, 5-109,
5-111, 5-113, 5-114, 5-118, 5-119, 5-121,
5-122, 5-123, 5-124, 5-125, 5-127, 5-131,
5-135, 5-141, 5-143, 5-144, 5-145, 5-148,
5-152, 5-154, 5-155, 5-157, 5-160, 5-182,
5-202, 5-203, 5-204, 5-205, 5-206, 5-208,
5-212, 5-213, 5-215, 5-218, 5-221, 5-229,
5-233, 5-283, 5-284, 5-317, 5-406, 5-490,
5-525, 6-17, 6-25, 6-29, 6-30, 6-31, 6-62,
7-4
- West Pit, 1-5, 1-17, 2-6, 3-2, 3-3, 3-16, 3-17,
3-39, 3-40, 3-45, 3-46, 3-47, 3-63, 3-64,
3-65, 3-71, 3-72, 3-129, 3-135, 3-137,
3-142, 3-147, 3-149, 3-151, 3-152, 3-153,
4-74, 4-79, 4-80, 4-81, 4-363, 5-6, 5-8,
5-12, 5-13, 5-15, 5-37, 5-56, 5-57, 5-81,
5-82, 5-83, 5-89, 5-90, 5-91, 5-92, 5-93,
5-94, 5-97, 5-98, 5-101, 5-102, 5-104,
5-106, 5-109, 5-111, 5-113, 5-114, 5-117,
5-118, 5-119, 5-120, 5-121, 5-122, 5-123,
5-124, 5-125, 5-127, 5-135, 5-141, 5-142,
5-144, 5-145, 5-147, 5-148, 5-149, 5-150,
5-151, 5-152, 5-154, 5-155, 5-156, 5-157,
5-162, 5-178, 5-188, 5-190, 5-191, 5-202,
5-203, 5-204, 5-208, 5-211, 5-213, 5-215,
5-216, 5-219, 5-233, 5-239, 5-283, 5-284,
5-342, 5-343, 5-344, 5-350, 5-373, 5-375,
5-385, 5-489, 5-490, 5-556, 6-29, 6-31,
8-5, 8-8, 8-9, 8-20
- infrastructure, 3-2, 3-17, 3-37, 3-64, 4-350,
5-123, 5-225, 5-226, 5-229, 5-239, 5-311,
5-317, 5-340, 5-342, 5-343, 5-349, 5-370,
5-402, 5-449, 5-487, 6-56
- layout, 3-17
- waste rock stockpiles, 3-17, 5-340

Plant Site

existing features, 3-3, 3-63, 3-83, 3-87, 3-91,
3-95, 3-99, 3-114, 3-123, 3-127, 4-12, 4-15,
4-165, 4-299, 4-300, 5-80, 5-121, 5-285,
5-442, 5-451, 5-482, 6-11, 6-12, 6-22, 6-85

new features, 3-3, 3-91, 3-95, 3-100, 3-101,
3-111, 3-128

Wastewater Treatment Plant (WWTP), 1-1,
3-3, 3-4, 3-7, 3-13, 3-15, 3-16, 3-52, 3-91,
3-116, 3-117, 3-123, 3-129, 3-130, 3-135,
3-136, 3-137, 3-148, 4-12, 4-68, 4-72,
4-89, 4-121, 4-122, 4-125, 4-269, 5-6, 5-8,
5-57, 5-79, 5-80, 5-81, 5-82, 5-89, 5-97,
5-98, 5-102, 5-121, 5-124, 5-152, 5-153,
5-157, 5-161, 5-162, 5-174, 5-177, 5-178,
5-179, 5-180, 5-181, 5-182, 5-188, 5-189,
5-190, 5-191, 5-192, 5-202, 5-203, 5-204,
5-205, 5-206, 5-207, 5-208, 5-209, 5-211,
5-212, 5-214, 5-215, 5-217, 5-220, 5-221,
5-297, 5-298, 5-307, 5-311, 5-380, 5-387,
5-391, 5-392, 5-406, 5-525, 6-11, 6-17,
6-21, 6-32, 6-33, 6-34, 6-62, 7-4, 7-5, 8-8

Tailings Basin, 1-1, 1-16, 2-3, 2-5, 2-8, 2-9, 3-3,
3-4, 3-7, 3-13, 3-16, 3-52, 3-53, 3-64, 3-72,
3-83, 3-87, 3-91, 3-100, 3-102, 3-103, 3-105,
3-116, 3-117, 3-119, 3-121, 3-123, 3-124,
3-128, 3-129, 3-135, 3-137, 3-141, 3-142,
3-148, 3-149, 3-153, 3-154, 3-155, 3-163,
4-3, 4-10, 4-11, 4-13, 4-14, 4-17, 4-19, 4-37,
4-41, 4-42, 4-61, 4-90, 4-91, 4-94, 4-95,
4-97, 4-99, 4-100, 4-101, 4-103, 4-105,
4-107, 4-108, 4-109, 4-110, 4-111, 4-112,
4-113, 4-114, 4-115, 4-116, 4-117, 4-121,
4-122, 4-126, 4-127, 4-128, 4-129, 4-130,
4-131, 4-136, 4-139, 4-158, 4-165, 4-166,
4-168, 4-193, 4-198, 4-204, 4-207, 4-211,
4-212, 4-237, 4-238, 4-259, 4-269, 4-279,
4-295, 4-299, 4-300, 4-301, 4-311, 4-312,
4-350, 4-363, 4-368, 4-369, 4-371, 4-372,
4-373, 4-375, 4-376, 4-377, 4-378, 4-383,
4-410, 5-5, 5-6, 5-7, 5-8, 5-9, 5-16, 5-38,
5-41, 5-45, 5-47, 5-57, 5-61, 5-62, 5-63,
5-67, 5-68, 5-69, 5-78, 5-79, 5-80, 5-81,
5-89, 5-90, 5-98, 5-102, 5-121, 5-123, 5-124,
5-153, 5-157, 5-158, 5-159, 5-160, 5-161,
5-162, 5-165, 5-173, 5-174, 5-177, 5-178,
5-181, 5-182, 5-188, 5-189, 5-190, 5-191,
5-192, 5-193, 5-195, 5-202, 5-204, 5-205,

5-206, 5-207, 5-208, 5-209, 5-211, 5-212,
5-214, 5-215, 5-216, 5-217, 5-220, 5-221,
5-225, 5-228, 5-229, 5-284, 5-285, 5-291,
5-297, 5-298, 5-299, 5-307, 5-308, 5-311,
5-339, 5-356, 5-357, 5-359, 5-360, 5-373,
5-374, 5-375, 5-379, 5-387, 5-391, 5-392,
5-394, 5-402, 5-410, 5-413, 5-431, 5-441,
5-452, 5-462, 5-476, 5-483, 5-485, 5-487,
5-489, 5-490, 5-504, 5-517, 5-518, 5-545,
5-556, 5-557, 5-561, 5-562, 5-563, 5-565,
5-566, 5-567, 5-568, 5-569, 5-570, 5-575,
5-576, 6-17, 6-24, 6-26, 6-27, 6-30, 6-32,
6-33, 6-34, 6-36, 6-56, 6-59, 6-105, 7-2, 7-3,
7-4, 7-5, 7-4, 7-9, 7-10, 8-5, 8-12, 8-16, 8-17

noxious weeds, 4-176, 5-344, 5-345, 5-359

non-native species, 3-66, 3-128, 3-129, 3-130,
4-174, 4-181, 4-182, 4-192, 4-198, 4-236,
4-469, 4-471, 4-475, 4-476, 4-509, 5-226,
5-323, 5-325, 5-339, 5-340, 5-343, 5-344,
5-345, 5-353, 5-357, 5-358, 5-359, 5-360,
5-364, 5-608, 5-613, 5-621, 5-624, 6-45, 6-117,
6-118, 6-122

O

Occupational Safety and Health Administration
(OSHA), 4-361, 5-527, 5-539

overburden, 1-1, 3-2, 3-15, 3-17, 3-37, 3-38, 3-40,
3-42, 3-43, 3-44, 3-51, 3-64, 3-66, 3-136, 3-147,
3-154, 5-94, 5-97, 5-101, 5-102, 5-204, 5-211,
5-219, 5-233, 5-311, 5-340, 5-343, 5-357, 5-402,
5-518, 5-546, 5-556

P

particulate matter, 1-19, 1-20, 4-37, 4-41, 4-42, 4-74,
4-79, 4-80, 4-81, 4-116, 4-117, 4-121, 4-122,
4-123, 4-125, 4-126, 4-127, 4-128, 4-129, 4-130,
4-131, 4-133, 4-238, 4-239, 4-241, 4-243, 4-244,
4-252, 4-254, 5-7, 5-8, 5-19, 5-46, 5-47, 5-177,
5-178, 5-179, 5-180, 5-181, 5-182, 5-183, 5-185,
5-186, 5-187, 5-188, 5-189, 5-190, 5-191, 5-193,
5-195, 5-196, 5-197, 5-198, 5-199, 5-200, 5-201,
5-209, 5-221, 5-229, 5-298, 5-340, 5-348, 5-391,
5-393, 5-395, 5-396, 5-398, 5-399, 5-400, 5-401,
5-403, 5-406, 5-407, 5-408, 5-409, 5-410, 5-411,
5-412, 5-413, 5-414, 5-420, 5-434, 5-439, 5-440,
5-441, 5-442, 5-449, 5-454, 5-457, 5-490, 6-3,
6-18, 6-26, 6-31, 6-32, 6-33, 6-45, 6-69, 6-75,

6-76, 6-77, 6-78, 6-79, 6-80, 6-82, 6-83, 6-85,
6-105
PAX (Potassium amyl xanthate), 3-100, 3-102,
5-531, 5-534, 5-536, 5-537
PCB (Polychlorinated biphenyl), 4-14, 4-16
permeable reactive barrier, 5-6, 5-215, 5-216
permits, licenses, and authorizations, 2-8, 2-10,
3-136, 3-138, 4-90, 4-126, 4-247, 5-217, 5-314,
5-316, 5-325, 5-336, 5-395, 5-428, 5-440, 5-556,
5-569, 8-6
Clean Air Act (CAA), 1-10, 4-340, 5-429, 5-430
Clean Water Act (CWA), 1-9, 1-10, 1-12, 1-16,
1-17, 2-8, 2-9, 4-135, 4-261, 4-262, 4-263,
4-297, 5-62, 5-224, 5-273, 5-312, 5-314, 5-315,
5-316, 5-321, 5-322, 5-336, 5-337, 5-338,
5-479, 5-484, 5-485, 5-595, 5-598, 5-601, 6-13,
6-89, 6-93, 8-1
requirements, 3-136, 5-221, 5-428, 5-429, 5-430,
5-568, 6-2, 7-4
PGE (platinum group element), 1-1, 1-5, 2-3, 3-1,
3-2, 3-4, 3-7, 3-33, 3-87, 3-107, 3-111, 3-123,
4-43, 5-5, 5-501, 6-13, 7-1
pollutants
sulfate (SO₄), 2-4, 3-65, 3-100, 3-102, 3-111,
3-123, 4-31, 4-32, 4-37, 4-54, 4-74, 4-79, 4-90,
4-93, 4-111, 4-114, 4-122, 4-133, 4-238, 4-410,
5-5, 5-8, 5-10, 5-18, 5-20, 5-21, 5-25, 5-61,
5-62, 5-67, 5-78, 5-80, 5-81, 5-82, 5-89, 5-94,
5-102, 5-109, 5-123, 5-127, 5-131, 5-140,
5-141, 5-142, 5-143, 5-144, 5-153, 5-155,
5-160, 5-161, 5-173, 5-182, 5-188, 5-193,
5-195, 5-196, 5-199, 5-200, 5-207, 5-208,
5-209, 5-210, 5-213, 5-216, 5-217, 5-221,
5-233, 5-275, 5-301, 5-341, 5-418, 5-490,
5-532, 5-591, 6-18, 6-29, 6-30, 6-31, 6-32,
6-33, 6-49, 6-59, 6-77, 6-79, 6-82, 6-85, 8-4,
8-6, 8-7
sulfur dioxide, 1-19, 1-20, 3-112, 5-395, 5-398,
5-399, 5-400, 5-401, 5-403, 5-406, 5-407,
5-408, 5-409, 5-410, 5-411, 5-412, 5-413,
5-414, 5-418, 5-419, 5-420, 5-421, 5-434,
5-522, 5-531, 5-542, 6-11, 6-49, 6-59, 6-69,
6-73, 6-75, 6-76, 6-77, 6-78, 6-79, 6-80, 6-82,
6-83, 6-84, 6-85, 6-86
population, 4-286, 5-1
public involvement
public comments, 1-18, 2-3, 2-4, 2-7, 2-8, 3-174,
4-1, 5-398, 6-14, 8-20

public meetings, 2-3, 2-7
public participation, 4-25
scoping, 1-13, 1-14, 1-18, 2-1, 2-2, 2-3, 2-4, 2-6,
2-7, 2-8, 3-140, 3-142, 3-156, 3-165, 3-166,
3-173, 3-174, 4-1, 4-201, 5-404, 5-424, 5-521
public services, 3-114, 4-338, 5-506, 5-507, 5-508,
5-538
Publically Owned Treatment Works (POTW), 3-154,
3-155, 6-7, 6-8, 6-21, 6-22, 6-23, 6-25, 6-27, 6-30,
6-31, 6-32, 6-34

R

railroads, 1-1, 3-3, 3-16, 3-63, 3-71, 3-83, 3-115,
3-127, 3-142, 3-157, 3-163, 4-9, 4-10, 4-33, 4-68,
4-78, 4-153, 4-157, 4-165, 4-173, 4-179, 4-180,
4-184, 4-191, 4-255, 4-289, 4-290, 4-295, 4-299,
4-301, 4-350, 4-377, 4-470, 5-21, 5-83, 5-215,
5-229, 5-276, 5-277, 5-348, 5-349, 5-350, 5-351,
5-357, 5-360, 5-373, 5-403, 5-434, 5-452, 5-474,
5-482, 5-484, 5-562, 5-587, 5-682, 6-47, 6-91, 7-2,
8-18
reclamation, 1-5, 1-11, 1-17, 2-9, 3-1, 3-2, 3-4, 3-5,
3-7, 3-15, 3-16, 3-38, 3-43, 3-44, 3-59, 3-63, 3-64,
3-65, 3-66, 3-71, 3-72, 3-79, 3-87, 3-123, 3-124,
3-127, 3-128, 3-129, 3-130, 3-135, 3-136, 3-137,
3-138, 3-139, 3-142, 3-151, 4-9, 4-175, 4-269,
4-368, 4-372, 5-4, 5-6, 5-7, 5-45, 5-81, 5-82, 5-93,
5-97, 5-98, 5-101, 5-114, 5-119, 5-122, 5-123,
5-124, 5-127, 5-131, 5-141, 5-153, 5-154, 5-161,
5-162, 5-178, 5-180, 5-181, 5-182, 5-188, 5-190,
5-191, 5-202, 5-212, 5-214, 5-217, 5-223, 5-224,
5-243, 5-284, 5-314, 5-317, 5-333, 5-343, 5-344,
5-357, 5-358, 5-372, 5-373, 5-377, 5-380, 5-387,
5-406, 5-411, 5-430, 5-476, 5-488, 5-499, 5-502,
5-504, 5-505, 5-507, 5-509, 5-512, 5-517, 5-549,
5-555, 5-567, 6-21, 6-88, 7-1, 7-2, 7-4, 7-7, 7-9,
7-10, 7-11, 8-7, 8-8, 8-9, 8-19
Record of Decision (ROD), 1-2, 1-13, 2-8, 3-6,
3-156, 3-163, 5-114, 6-8, 6-10, 6-12, 6-24
Regional Climate and Meteorology, 3-41, 3-46, 3-52,
3-64, 3-65, 3-66, 3-112, 3-116, 3-117, 3-123,
3-130, 3-135, 4-19, 4-24, 4-38, 4-42, 4-46, 4-61,
4-148, 4-149, 4-150, 4-151, 4-152, 4-165, 4-247,
4-371, 5-5, 5-6, 5-51, 5-79, 5-80, 5-81, 5-83,
5-123, 5-124, 5-161, 5-202, 5-205, 5-213, 5-216,
5-217, 5-221, 5-228, 5-239, 5-243, 5-273, 5-274,
5-275, 5-283, 5-298, 5-300, 5-301, 5-342, 5-343,

5-379, 5-387, 5-391, 5-408, 5-427, 5-428, 5-430,
6-27, 6-28, 6-31, 6-33, 6-49, 6-59, 6-77, 8-4, 8-12
Regional Forester Sensitive Species, 3-158, 4-169,
4-179, 4-180, 4-181, 4-182, 4-183, 4-184, 4-187,
4-192, 4-201, 4-203, 4-204, 4-205, 4-208, 4-209,
4-212, 4-213, 4-221, 4-233, 4-245, 4-313, 4-465,
4-471, 4-472, 4-475, 4-477, 4-484, 4-489, 4-500,
4-503, 4-505, 4-509, 4-510, 4-511, 4-512, 4-513,
4-514, 4-515, 4-517, 4-519, 4-520, 4-521, 4-527,
4-536, 4-541, 4-545, 5-339, 5-351, 5-352, 5-361,
5-363, 5-364, 5-375, 5-379, 5-380, 5-390, 5-391,
5-394, 5-605, 5-606, 5-608, 5-615, 5-616, 5-622,
5-623, 5-624, 5-625, 5-626, 5-627, 5-633, 5-634,
5-635, 5-638, 5-639, 5-641, 5-651, 6-43, 6-46,
6-47, 6-48, 6-50, 6-117, 6-118, 6-122, 6-123,
6-124, 6-127, 6-128, 7-6
Research Natural Area, 3-164, 4-357, 5-522, 5-619
Responsible Governmental Unit (RGU), 1-9, 1-13,
2-2, 8-2

S

Scientific and Natural Area, 4-169, 4-173, 4-192,
4-197, 4-308, 4-357, 4-467, 4-473, 4-479, 4-486,
4-488, 4-490, 4-492, 4-497, 4-499, 4-502, 4-505
seepage, 2-5, 3-4, 3-7, 3-13, 3-16, 3-52, 3-71, 3-91,
3-116, 3-117, 3-123, 3-129, 3-135, 3-142, 3-147,
3-148, 3-149, 3-154, 4-17, 4-46, 4-71, 4-82, 4-90,
4-95, 4-99, 4-111, 4-113, 4-116, 4-121, 4-122,
4-126, 4-150, 4-151, 4-165, 4-166, 4-185, 4-371,
4-410, 5-5, 5-6, 5-7, 5-8, 5-38, 5-54, 5-61, 5-63,
5-67, 5-68, 5-69, 5-79, 5-80, 5-81, 5-89, 5-94,
5-97, 5-98, 5-101, 5-102, 5-113, 5-121, 5-122,
5-123, 5-148, 5-153, 5-154, 5-157, 5-158, 5-159,
5-160, 5-161, 5-162, 5-165, 5-173, 5-174, 5-177,
5-181, 5-182, 5-188, 5-189, 5-190, 5-191, 5-192,
5-193, 5-195, 5-202, 5-203, 5-204, 5-205, 5-206,
5-207, 5-208, 5-209, 5-210, 5-211, 5-212, 5-214,
5-215, 5-216, 5-217, 5-220, 5-221, 5-224, 5-225,
5-228, 5-229, 5-283, 5-284, 5-285, 5-297, 5-298,
5-307, 5-309, 5-311, 5-338, 5-341, 5-380, 5-387,
5-391, 5-392, 5-394, 5-561, 5-562, 5-565, 5-568,
5-570, 6-17, 6-23, 6-26, 6-27, 6-29, 6-30, 6-31,
6-32, 6-33, 6-34, 6-59, 7-5, 7-7
soils
alluvial, 4-147, 4-185, 4-285, 4-367, 4-383
contamination, 5-319
cover, 5-6, 5-79, 5-82, 5-100, 5-162, 5-214
erosion, 3-5, 3-59, 3-124, 5-339, 5-344

hydric, 4-150, 5-319
topsoil, 3-71
Species of Greatest Conservation Need, 4-30, 4-201,
4-205, 4-206, 4-207, 4-208, 4-211, 4-212, 4-213,
4-221, 4-228, 4-233, 4-245, 4-511, 4-512, 4-513,
4-514, 4-515, 4-517, 4-519, 4-521, 4-527, 4-536,
4-541, 4-545, 5-363, 5-364, 5-369, 5-370, 5-371,
5-372, 5-373, 5-374, 5-375, 5-379, 5-380, 5-390,
5-394, 5-625, 5-627, 5-632, 5-633, 5-634, 5-635,
5-637, 5-638, 5-641, 5-651, 5-652, 5-656, 6-50,
6-55, 6-127, 6-128, 7-6
St. Louis County, Minnesota, 1-5, 1-17, 3-1, 3-6,
3-17, 3-63, 3-64, 3-127, 3-163, 3-164, 4-3, 4-4,
4-9, 4-10, 4-148, 4-181, 4-183, 4-202, 4-263,
4-285, 4-300, 4-315, 4-319, 4-320, 4-321, 4-322,
4-323, 4-324, 4-325, 4-326, 4-328, 4-329, 4-330,
4-331, 4-332, 4-334, 4-335, 4-338, 4-341, 4-386,
4-387, 4-391, 4-401, 4-402, 4-408, 4-451, 4-501,
4-557, 5-3, 5-315, 5-316, 5-318, 5-320, 5-325,
5-341, 5-353, 5-410, 5-494, 5-495, 5-499, 5-534,
5-585, 5-677, 5-678, 6-14, 6-15, 6-16, 6-35, 6-36,
6-37, 6-64, 6-82, 6-83, 6-84, 6-101, 6-102, 6-104
Standard Industrial Classification, 4-323, 4-324,
4-325, 4-328
State Historic Preservation Office (SHPO), 4-255,
4-259, 4-261, 4-263, 4-264, 4-279, 4-296, 4-298,
4-302, 4-303, 4-555, 5-479, 5-481, 5-482, 5-483,
5-484, 5-673
sulfate (SO₄), 2-4, 3-65, 3-100, 3-102, 3-111, 3-123,
4-31, 4-32, 4-37, 4-54, 4-74, 4-79, 4-90, 4-93,
4-111, 4-114, 4-122, 4-133, 4-238, 4-410, 5-5, 5-8,
5-10, 5-18, 5-20, 5-21, 5-25, 5-61, 5-62, 5-67,
5-78, 5-80, 5-81, 5-82, 5-89, 5-94, 5-102, 5-109,
5-123, 5-127, 5-131, 5-140, 5-141, 5-142, 5-143,
5-144, 5-153, 5-155, 5-160, 5-161, 5-173, 5-182,
5-188, 5-193, 5-195, 5-196, 5-199, 5-200, 5-207,
5-208, 5-209, 5-210, 5-213, 5-216, 5-217, 5-221,
5-233, 5-275, 5-301, 5-341, 5-418, 5-490, 5-532,
5-591, 6-18, 6-29, 6-30, 6-31, 6-32, 6-33, 6-49,
6-59, 6-77, 6-79, 6-82, 6-85, 8-4, 8-6, 8-7
sulfate standard, 4-32, 4-78, 4-79, 4-133, 5-5, 5-21,
5-25, 5-144, 5-208, 5-341, 6-32, 8-6, 8-7
sulfur dioxide, 1-19, 1-20, 3-112, 5-395, 5-398,
5-399, 5-400, 5-401, 5-403, 5-406, 5-407, 5-408,
5-409, 5-410, 5-411, 5-412, 5-413, 5-414, 5-418,
5-419, 5-420, 5-421, 5-434, 5-522, 5-531, 5-542,
6-11, 6-49, 6-59, 6-69, 6-73, 6-75, 6-76, 6-77,
6-78, 6-79, 6-80, 6-82, 6-83, 6-84, 6-85, 6-86

Superior National Forest, 1-2, 1-5, 1-11, 3-6, 3-33, 3-156, 3-157, 3-163, 3-164, 3-165, 3-166, 4-3, 4-4, 4-9, 4-148, 4-150, 4-169, 4-174, 4-175, 4-180, 4-181, 4-182, 4-183, 4-184, 4-185, 4-192, 4-198, 4-202, 4-203, 4-208, 4-209, 4-233, 4-234, 4-254, 4-255, 4-256, 4-285, 4-286, 4-327, 4-343, 4-344, 4-349, 4-350, 4-354, 4-357, 4-358, 4-359, 4-386, 4-391, 4-395, 4-396, 4-397, 4-401, 4-402, 4-449, 4-464, 4-465, 4-468, 4-471, 4-475, 4-477, 4-479, 4-483, 4-484, 4-488, 4-489, 4-500, 4-501, 4-503, 4-505, 4-509, 4-510, 4-513, 4-515, 4-517, 4-519, 4-520, 4-521, 4-527, 4-536, 4-541, 4-549, 4-557, 4-560, 4-561, 4-562, 4-563, 4-564, 4-565, 5-3, 5-4, 5-351, 5-352, 5-361, 5-375, 5-391, 5-394, 5-445, 5-458, 5-461, 5-476, 5-511, 5-512, 5-513, 5-514, 5-521, 5-523, 5-524, 5-577, 5-578, 5-579, 5-580, 5-585, 5-586, 5-587, 5-588, 5-589, 5-591, 5-594, 5-595, 5-603, 5-605, 5-608, 5-612, 5-613, 5-615, 5-616, 5-618, 5-621, 5-622, 5-623, 5-625, 5-626, 5-629, 5-634, 5-639, 5-642, 5-643, 5-645, 5-646, 5-651, 5-652, 5-653, 5-654, 5-655, 5-656, 5-661, 5-671, 5-673, 5-680, 5-681, 5-683, 5-684, 5-691, 5-692, 5-703, 5-707, 5-710, 6-15, 6-49, 6-101, 6-103, 6-104, 6-105, 6-109, 6-110, 6-111, 6-112, 6-113, 6-114, 6-115, 6-116, 6-117, 6-118, 6-119, 6-120, 6-121, 6-122, 6-123, 6-124, 6-125, 6-126, 6-127, 6-128, 6-129, 6-130, 6-131, 6-132, 7-2

Superior National Forest Land and Resource Management Plan 2004, 1-11, 1-12, 1-15, 2-6, 2-7, 3-142, 3-157, 3-158, 3-159, 3-163, 3-166, 3-173, 4-3, 4-4, 4-343, 4-349, 4-556, 5-3, 5-360, 5-365, 5-591, 5-594, 5-595, 5-603, 5-608, 5-609, 5-611, 5-616, 5-623, 5-624, 5-625, 5-626, 5-629, 5-639, 5-656, 5-673, 5-678, 5-683, 5-709, 5-710, 6-109, 6-114, 6-116, 6-118, 6-128, 6-130, 7-11

Supplemental Draft Environmental Impact Statement (SDEIS), 1-1, 1-9, 1-10, 1-13, 1-15, 1-18, 1-19, 1-20, 2-1, 2-4, 2-5, 2-6, 2-7, 2-8, 3-1, 3-5, 3-6, 3-7, 3-136, 3-139, 3-140, 3-141, 3-142, 3-147, 3-149, 3-150, 3-151, 3-152, 3-153, 3-156, 3-165, 3-166, 3-173, 4-1, 4-53, 4-60, 4-67, 4-99, 4-107, 4-109, 4-114, 4-115, 4-135, 4-199, 4-213, 4-221, 4-253, 4-261, 4-263, 4-264, 4-298, 4-305, 4-327, 4-349, 5-7, 5-10, 5-11, 5-12, 5-14, 5-16, 5-19, 5-20, 5-25, 5-26, 5-55, 5-61, 5-109, 5-117, 5-181, 5-210, 5-221, 5-229, 5-314, 5-328, 5-329, 5-332, 5-364, 5-375, 5-395, 5-398, 5-399, 5-402, 5-427, 5-433, 5-485, 5-490, 5-493, 5-495, 5-497, 5-498, 5-500,

5-501, 5-510, 5-546, 5-606, 5-625, 5-634, 5-641, 5-643, 5-674, 5-677, 5-681, 6-2, 6-10, 6-15, 6-16, 6-17, 6-56, 6-63, 6-130, 8-1, 8-2, 8-3, 8-4, 8-5, 8-4, 8-5, 8-6, 8-7, 8-6, 8-7, 8-7, 8-8, 8-9, 8-10, 8-9, 8-10, 8-10, 8-11, 8-11, 8-12, 8-12, 8-13, 8-13, 8-14, 8-15, 8-14, 8-15, 8-16, 8-17, 8-16, 8-17, 8-17, 8-18, 8-19, 8-18, 8-19, 8-19, 8-20
surface water, 1-17, 2-2, 2-5, 3-5, 3-37, 3-51, 3-59, 3-71, 3-72, 3-116, 3-117, 3-124, 3-129, 3-130, 3-131, 3-135, 3-137, 3-147, 3-148, 3-151, 4-17, 4-19, 4-24, 4-25, 4-31, 4-42, 4-53, 4-60, 4-66, 4-68, 4-73, 4-74, 4-78, 4-79, 4-81, 4-82, 4-86, 4-90, 4-94, 4-95, 4-99, 4-109, 4-114, 4-115, 4-121, 4-123, 4-125, 4-126, 4-130, 4-132, 4-148, 4-149, 4-151, 4-152, 4-153, 4-165, 4-182, 4-214, 4-215, 4-219, 4-220, 4-236, 4-269, 4-336, 4-408, 4-409, 4-410, 4-439, 4-521, 4-522, 4-525, 4-531, 4-541, 5-5, 5-6, 5-7, 5-8, 5-9, 5-10, 5-13, 5-14, 5-16, 5-18, 5-19, 5-20, 5-21, 5-25, 5-26, 5-27, 5-37, 5-45, 5-47, 5-54, 5-55, 5-57, 5-62, 5-68, 5-77, 5-78, 5-79, 5-80, 5-82, 5-89, 5-91, 5-92, 5-93, 5-105, 5-114, 5-119, 5-121, 5-122, 5-127, 5-131, 5-135, 5-144, 5-145, 5-153, 5-154, 5-157, 5-158, 5-159, 5-160, 5-162, 5-165, 5-174, 5-177, 5-182, 5-189, 5-190, 5-191, 5-192, 5-201, 5-202, 5-207, 5-216, 5-219, 5-221, 5-226, 5-228, 5-229, 5-243, 5-271, 5-284, 5-297, 5-307, 5-308, 5-337, 5-358, 5-379, 5-380, 5-392, 5-489, 5-499, 5-522, 5-528, 5-529, 5-530, 5-537, 5-538, 5-541, 5-543, 5-562, 5-591, 5-592, 5-593, 5-603, 5-641, 5-642, 5-644, 5-652, 6-16, 6-18, 6-21, 6-22, 6-29, 6-31, 6-60, 6-61, 6-126, 6-127, 7-1, 7-4, 8-1, 8-5, 8-6, 8-9, 8-10, 8-11, 8-13, 8-14, 8-15, 8-15
water flow, 3-51, 4-95, 4-152, 5-8, 5-54, 5-57, 5-158, 5-177, 5-228, 5-379, 6-17, 8-9
water withdrawals, 4-68, 4-121, 6-22

T

tax revenue, 4-290, 4-332, 4-385, 5-503, 5-504, 5-505, 5-507, 5-677, 5-678, 5-679
terrestrial vegetation
ecosystems, 4-468, 4-469, 4-474, 4-476, 4-483, 4-486, 4-488, 4-491, 4-493, 4-498, 4-500, 4-503, 4-505, 5-221, 5-487, 5-605, 5-608, 5-610, 5-612, 5-613, 5-620, 5-621, 5-681, 6-3, 6-62, 6-120, 8-19
native vegetation, 5-224, 5-323, 5-324, 5-326, 5-333, 5-356, 5-359

open water, 4-136, 4-147, 4-154, 4-157, 4-165, 4-168, 4-170, 4-181, 4-204, 4-208, 4-284, 4-305, 4-312, 4-354, 4-434, 4-447, 4-450, 4-455, 4-456, 4-457, 4-458, 4-459, 4-463, 4-466, 4-467, 4-474, 4-478, 4-501, 4-522, 5-230, 5-247, 5-259, 5-272, 5-286, 5-291, 5-309, 5-343, 5-373, 5-374, 5-375, 5-489, 5-595, 5-596, 5-598, 5-599, 5-601, 5-602, 5-614, 6-55

upland forest, 4-61, 4-116, 4-170, 4-187, 4-205, 4-208, 4-211, 4-344, 4-467, 4-468, 4-473, 4-474, 4-476, 4-477, 4-484, 4-489, 4-491, 4-493, 4-498, 4-500, 4-503, 4-510, 5-351, 5-365, 5-371, 5-514, 5-605, 5-611, 5-612, 5-616, 5-619, 5-620, 5-623

wetland forest, 4-451, 4-460, 4-497, 5-349

Total Dissolved Solids, 4-90, 4-93, 4-94, 4-108, 4-110, 4-111, 4-112, 4-114, 5-5, 5-10, 5-11, 5-16, 5-17, 5-109, 5-113, 5-129, 5-168, 5-173, 5-174

Total Maximum Daily Load, 1-20, 4-25, 4-29, 4-86, 4-89, 4-133, 4-220, 4-236, 4-238, 5-432, 6-33, 6-63, 8-5, 8-6

Transportation and Utility Corridor, 1-1, 3-1, 3-3, 3-6, 3-7, 3-13, 3-15, 3-53, 3-79, 3-80, 3-81, 3-83, 3-87, 3-155, 4-3, 4-4, 4-9, 4-10, 4-19, 4-42, 4-79, 4-135, 4-136, 4-139, 4-145, 4-149, 4-154, 4-157, 4-169, 4-191, 4-192, 4-199, 4-201, 4-207, 4-210, 4-211, 4-212, 4-241, 4-309, 4-310, 4-311, 4-312, 4-313, 4-314, 4-315, 4-341, 4-343, 4-344, 4-349, 4-350, 4-353, 5-3, 5-4, 5-16, 5-79, 5-89, 5-90, 5-98, 5-119, 5-121, 5-223, 5-224, 5-225, 5-226, 5-229, 5-230, 5-233, 5-235, 5-239, 5-309, 5-311, 5-337, 5-339, 5-345, 5-346, 5-352, 5-353, 5-354, 5-355, 5-356, 5-360, 5-366, 5-368, 5-369, 5-371, 5-372, 5-374, 5-375, 5-376, 5-452, 5-453, 5-462, 5-475, 5-485, 5-486, 5-487, 5-488, 5-489, 5-490, 5-493, 5-494, 5-508, 5-511, 5-512, 5-513, 5-514, 5-518, 6-57, 6-101, 7-1, 7-2, 8-18

Tribal Historic Preservation Office, 4-264

U

U.S. legislation and regulations

Clean Air Act (CAA), 1-10, 4-251, 5-397, 5-398, 5-401, 5-428, 5-429, 5-441, 5-490, 5-527, 5-539, 5-542, 6-95

Clean Water Act (CWA), 1-9, 1-13, 1-15, 1-16, 2-8, 2-9, 4-25, 4-135, 4-245, 4-263, 4-440,

5-224, 5-312, 5-314, 5-316, 5-319, 5-321, 5-333, 5-338, 5-490, 6-13, 6-95, 8-6

Section 401, 1-17, 2-9, 4-135, 5-312, 5-316

Section 404, 1-9, 1-13, 1-16, 1-17, 2-8, 2-9, 4-135, 5-224, 5-273, 5-312, 5-314, 5-315, 5-316, 5-321, 5-322, 5-336, 5-337, 5-338, 5-595, 5-598, 5-601, 6-13

Code of Federal Regulations (CFR), 1-9, 1-12, 1-13, 1-14, 1-16, 1-18, 2-8, 3-139, 3-140, 3-141, 3-159, 4-1, 4-202, 4-261, 4-262, 4-263, 4-303, 5-1, 5-12, 5-16, 5-18, 5-77, 5-313, 5-314, 5-401, 5-441, 5-479, 5-526, 5-527, 5-534, 5-538, 5-539, 5-540, 5-680, 6-1, 6-79, 6-80, 6-81, 6-86, 7-10, 7-12, 8-1, 8-2

Endangered Species Act (ESA), 1-16, 2-9, 4-3, 4-10, 4-12, 4-15, 4-16, 4-113, 4-201, 4-385, 4-395, 5-363, 5-364, 5-490, 6-95

Section 7, 1-16, 2-9, 5-364, 7-2, 7-3, 7-10

Federal Land Policy and Management Act (FLPMA), 1-14

Migratory Bird Treaty Act (MBTA), 4-204

National Environmental Policy Act (NEPA), 1-9, 1-10, 1-12, 1-13, 1-16, 1-19, 2-2, 2-3, 2-6, 2-8, 3-7, 3-139, 3-140, 3-142, 3-165, 4-1, 4-261, 4-263, 4-305, 5-1, 5-77, 5-497, 6-1, 6-24, 6-25, 6-93, 6-99, 7-1, 7-10, 7-11, 8-3, 8-12, 8-16, 8-20

underground storage tank, 4-13, 4-14

United States

Bureau of Land Management (BLM), 4-353

Council on Environmental Quality (CEQ), 1-12, 1-13, 1-18, 3-5, 3-139, 3-140, 3-141, 5-497, 6-1, 6-2, 6-16, 6-17, 6-86, 7-12, 8-12, 8-19

Department of Agriculture (USDA), 4-150, 4-344, 4-391, 5-586

Department of Energy (USDOE), 5-532, 6-8, 6-10, 6-16, 6-24, 6-30, 6-102, 6-103

Department of Housing and Urban Development, 4-451

Department of the Interior (USDOI), 4-263, 5-679

Department of Transportation (USDOT), 4-359, 4-361, 5-429, 5-527, 5-531, 5-532, 5-534, 5-537, 5-538, 5-539

Environmental Protection Agency (USEPA), 1-10, 1-15, 1-18, 4-25, 4-42, 4-89, 4-109, 4-213, 4-226, 4-241, 4-247, 4-252, 4-254, 4-256, 4-259, 4-261, 4-361, 4-526, 4-535, 4-547, 4-553, 5-10, 5-11, 5-12, 5-16, 5-18, 5-20, 5-55,

5-56, 5-147, 5-219, 5-316, 5-373, 5-395, 5-397,
5-398, 5-403, 5-404, 5-406, 5-407, 5-409,
5-413, 5-414, 5-421, 5-428, 5-429, 5-430,
5-435, 5-440, 5-441, 5-442, 5-452, 5-526,
5-527, 5-539, 5-540, 5-643, 5-649, 6-1, 6-2,
6-63, 6-64, 6-77, 6-78, 6-79, 6-85, 6-88, 8-1,
8-2, 8-3, 8-7

Federal Emergency Management Agency
(FEMA), 4-436, 4-439, 4-451, 4-462, 5-595,
5-598, 5-601, 5-709

Federal Highway Administration (FHA), 5-535,
5-536, 5-537

Federal Register (FR), 1-9, 2-3, 2-4, 5-448

Fish and Wildlife Service (USFWS), 1-10, 1-16,
2-9, 4-139, 4-148, 4-201, 4-202, 4-203, 4-233,
4-353, 5-363, 5-364, 5-367, 5-368, 5-380,
5-390, 5-394, 5-614, 6-34, 6-43, 6-103

Geological Survey (USGS), 4-32, 4-46, 4-54,
4-61, 4-62, 4-66, 4-67, 4-73, 4-74, 4-116,
4-125, 4-139, 4-148, 4-429, 5-21, 5-46, 5-92,
5-120, 5-319, 5-379, 5-437, 6-26, 6-34

Health and Human Services (HHS), 5-436

National Oceanic and Atmospheric Administration
(NOAA), 5-427, 5-430

National Park Service (NPS), 4-256, 4-263, 4-354,
5-399, 5-407, 5-417, 5-419, 5-420, 5-448, 6-85,
6-103

United States Code, 1-9, 1-10, 1-12, 1-14, 4-353,
5-521, 5-527, 5-542, 6-103

University of Minnesota Duluth, 4-339, 5-495

V

visual resources, 4-349, 4-359, 4-559, 5-502, 5-505,
5-511, 5-512, 5-518, 5-522, 5-523, 5-683, 5-684,
5-692, 5-709, 6-2, 6-101, 6-102, 6-129, 6-130, 7-9,
7-10, 7-11, 7-12

Scenic Integrity Objectives, 4-349, 4-350, 4-559,
4-560, 4-561, 4-562, 4-563, 4-564, 4-565,
5-517, 5-518, 5-683, 5-684, 5-692, 5-693,
5-695, 5-697, 5-699, 5-703, 5-705, 5-707,
6-130, 6-131, 6-132

volatile organic compound (VOC), 4-17, 5-403,
5-428, 6-79

Voluntary Investigation and Cleanup, 3-142, 4-11,
4-12, 4-15, 4-16, 5-4, 5-55

Voyageurs National Park, 3-1, 4-251, 4-286, 4-354,
4-560, 5-395, 5-399, 5-413, 5-414, 5-415, 5-416,
5-417, 5-419, 5-420, 5-421, 5-511, 5-522, 5-524,

6-15, 6-63, 6-77, 6-78, 6-80, 6-82, 6-83, 6-85,
6-101, 6-103, 6-105

W

water management, 3-7, 3-15, 3-16, 3-37, 3-44, 3-46,
3-53, 3-71, 3-72, 3-102, 3-103, 3-113, 3-115,
3-116, 3-123, 3-128, 3-129, 3-135, 3-142, 3-149,
3-151, 3-153, 4-23, 5-79, 5-81, 5-82, 5-98, 5-144,
5-158, 5-212, 5-213, 5-562, 6-25

water resources, 1-18, 2-2, 2-4, 2-5, 2-7, 4-149,
4-165, 4-407, 4-408, 4-441, 5-5, 5-25, 5-117,
5-210, 5-211, 5-216, 5-427, 5-591, 5-592, 5-594,
5-595, 5-598, 5-600, 5-603, 5-709, 6-16, 6-36,
6-114, 7-11, 7-12, 8-1, 8-7, 8-12, 8-13, 8-14, 8-16
municipal water supplies, 4-23, 6-8, 6-28
potable water, 1-17, 3-3, 3-114, 4-23, 4-85, 5-10,
5-506, 6-9, 6-23

surface waterbodies, 5-93, 5-122, 5-380

water supply, 4-23, 4-44, 4-60, 5-113, 5-150, 6-27

water table, 3-44, 3-46, 3-52, 4-24, 4-47, 4-53,
4-95, 4-99, 4-149, 4-150, 4-151, 4-152, 4-153,
4-435, 4-448, 5-101, 5-227, 5-335, 5-337, 6-45,
8-10

water temperature, 4-31, 4-236

water use, 3-113, 3-123, 4-24, 4-31, 4-37, 4-93,
4-173, 4-197, 5-10, 5-16, 5-18, 5-21, 5-140, 8-6

waterbodies, 4-23, 4-24, 4-29, 4-32, 4-37, 4-109,
4-211, 4-213, 4-215, 4-219, 4-235, 4-283, 4-410,
4-527, 4-541, 5-9, 5-20, 5-93, 5-124, 5-125, 5-208,
5-219, 5-221, 5-379, 5-380, 5-509, 5-537, 5-592,
5-631, 5-636, 6-2, 6-23, 6-34, 6-60, 6-62, 6-101

floodplain, 1-15, 3-3, 3-65, 3-71, 3-72, 3-129,
3-137, 4-67, 4-68, 4-156, 4-185, 4-436, 4-439,
4-440, 4-451, 4-462, 4-522, 4-531, 5-79, 5-81,
5-90, 5-97, 5-114, 5-117, 5-119, 5-124, 5-162,
5-203, 5-211, 5-233, 5-319, 5-321, 5-373,
5-427, 5-489, 5-595, 5-597, 5-598, 5-601,
5-645, 5-709, 6-9, 6-24, 7-5

impaired or contaminated waterbodies, 4-25, 4-74,
4-89, 4-133, 4-245, 5-8, 6-33, 6-59, 6-61, 8-7,
8-6

wells

locations, 5-219, 5-337

water supply, 4-44, 4-60, 5-113

West Pit backfill, 8-8

wetlands

mitigation, 2-10, 3-15, 3-136, 5-223, 5-224, 5-310,
5-311, 5-312, 5-313, 5-314, 5-315, 5-316,

5-317, 5-318, 5-319, 5-320, 5-321, 5-322,
5-324, 5-325, 5-326, 5-333, 5-334, 5-335,
5-338, 5-433, 6-35, 7-11

wild rice, 1-19, 1-20, 2-4, 2-5, 3-159, 4-29, 4-30,
4-31, 4-32, 4-33, 4-37, 4-75, 4-79, 4-93, 4-123,
4-126, 4-130, 4-132, 4-133, 4-147, 4-173, 4-197,
4-255, 4-259, 4-285, 4-286, 4-288, 4-297, 4-306,
4-307, 4-310, 4-340, 4-391, 4-407, 4-408, 4-409,
4-410, 4-480, 5-5, 5-8, 5-18, 5-21, 5-25, 5-129,
5-140, 5-144, 5-153, 5-181, 5-185, 5-193, 5-208,
5-216, 5-322, 5-341, 5-457, 5-461, 5-473, 5-474,
5-475, 5-476, 5-493, 5-585, 5-591, 5-592, 5-593,
5-594, 5-609, 5-618, 6-29, 6-30, 6-32, 6-33, 6-95,
6-114, 6-115, 6-128, 8-6, 8-7

wildlife, 4-201, 4-210, 4-212, 4-311, 4-312, 4-313,
4-476, 4-514, 4-516, 4-518, 4-519, 4-520, 5-345,
5-363, 5-369, 5-370, 5-373, 5-374, 5-375, 5-377,
5-487, 5-611, 5-626, 5-627, 5-634, 5-635, 5-639,
6-50, 6-51, 6-55, 6-58, 6-59, 6-122, 6-123, 6-124,
7-6

amphibians, 4-435, 4-448, 5-370

aquatic species, 4-201, 4-220, 4-306, 4-536, 5-373,
5-379, 5-380, 5-387, 5-390, 5-391, 5-394,
5-489, 5-513, 5-521, 5-523, 5-641, 5-642,
5-646, 5-651, 5-652, 5-653, 5-654, 5-656,
5-657, 6-61, 6-102, 6-126, 6-127, 6-128, 7-7,
7-11, 7-12

breeding, 4-156, 4-202, 4-209, 4-448, 5-363, 5-372

endangered species, 2-2, 2-7, 3-158, 4-176, 4-180,
4-181, 4-182, 4-213, 4-233, 4-308, 4-470,
4-475, 5-345, 5-348, 5-354, 5-356, 5-363,
5-379, 5-380, 5-390, 5-394, 5-605, 5-608, 6-3,
6-48

feeding, 4-228, 5-82

foraging, 4-30, 4-209, 4-284, 5-368, 5-369, 5-370,
5-373, 5-375, 5-376, 5-631, 5-636

hunting, 1-10, 4-203, 4-204, 4-209, 4-210, 4-285,
4-297, 4-304, 4-306, 4-308, 4-310, 4-311,
4-325, 4-326, 4-328, 4-334, 4-340, 4-341,
4-354, 4-357, 4-436, 4-557, 4-561, 4-562,
4-563, 4-564, 4-565, 5-367, 5-370, 5-377,
5-447, 5-490, 5-494, 5-512, 5-513, 5-585,
5-635, 5-661, 5-671, 5-679, 5-691, 5-703, 6-1,
6-58, 6-89, 6-102, 6-124

injury, 4-396

invasive species, 4-174, 4-175, 4-183, 4-192,
4-198, 4-213, 4-221, 4-488, 4-500, 4-503,
4-505, 4-542, 5-323, 5-325, 5-339, 5-344,
5-345, 5-353, 5-359, 6-94

invertebrates, 4-29, 4-243

migratory birds, 6-110

mortality, 4-202, 4-204, 4-209, 4-211, 4-361,
4-488, 5-363, 5-365, 5-366, 5-367, 5-369,
5-370, 5-435, 5-439, 5-487, 6-56

nesting, 4-30, 4-204, 4-209, 4-211, 5-368, 5-369,
5-370, 5-487, 5-631, 5-632, 5-636, 5-637

non-native species, 3-66, 3-128, 3-130, 4-174,
4-181, 4-182, 4-192, 4-469, 4-471, 4-475,
4-476, 4-509, 5-226, 5-339, 5-340, 5-343,
5-344, 5-345, 5-359, 5-360, 5-364, 5-608,
5-613, 5-621, 5-624, 6-45, 6-117, 6-118, 6-122

population, 5-513, 6-50, 6-55

predators, 5-365, 5-431

prey, 4-203, 4-204, 5-364, 5-367, 5-368, 5-373,
5-625, 5-627, 5-630, 6-124

protected species, 5-363, 6-44, 6-51

reproduction, 4-30, 4-202, 4-435, 4-448, 5-370

reptiles, 5-370, 5-633, 5-638

small game, 4-31, 4-68, 4-152, 4-153, 4-155,
4-157, 4-165, 4-167, 4-179, 4-182, 4-183,
4-185, 4-203, 4-210, 4-214, 4-221, 4-288,
4-307, 4-311, 4-433, 4-439, 4-450, 4-456,
4-457, 4-459, 4-463, 4-470, 4-471, 4-485,
4-487, 4-492, 4-501, 4-514, 4-516, 4-518,
4-519, 4-520, 5-635

territories, 5-368

threatened species, 4-176, 4-180, 4-181, 4-201,
4-203, 4-204, 4-205, 4-470, 4-505, 4-509,
5-348, 5-363, 6-48

waterfowl, 4-30, 4-212, 4-312, 5-368, 5-373