# HOUSE FILE NO. 1621

## *FIRST COMMITTEE ENGROSSMENT*

March 1, 2007
Authored by Bunn, Clark, Bigham, McNamara, Swails and others
The bill was read for the first time and referred to the Committee on Health and Human Services
March 20, 2007
Committee Recommendation and Adoption of Report:
To Pass as Amended and re-referred to the Committee on Public Safety and Civil Justice
By motion, recalled and re-referred to the Committee on Finance

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*Referred by Chair to Housing Policy and Finance and Public Health Finance Division.*
*March 23, 2007*
*Returned to the Committee on Finance as Amended.*

A bill for an act

relating to health; establishing an environmental health tracking and biomonitoring program; authorizing a biomonitoring pilot program; establishing an advisory panel; appropriating money; amending Minnesota Statutes 2006, section 144.3831, subdivision 1; proposing coding for new law in Minnesota Statutes, chapter 144.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF MINNESOTA:

Section 1. Minnesota Statutes 2006, section 144.3831, subdivision 1, is amended to read:

Subdivision 1. **Fee setting.** The commissioner of health, in cooperation with the commissioner of the Pollution Control Agency, may assess an annual fee of ~~$6.36~~ $6.81 for every service connection to a public water supply that is owned or operated by a home rule charter city, a statutory city, a city of the first class, or a town. The commissioner of health may also assess an annual fee for every service connection served by a water user district defined in section 110A.02.

Sec. 2. **[144.995] DEFINITIONS.**

(a) For purposes of sections 144.995 to 144.998, the terms in this section have the meanings given.

(b) "Advisory panel" means the Environmental Health Tracking and Biomonitoring Advisory Panel established under section 144.998.

(c) "Biomonitoring" means the process by which chemicals and their metabolites are identified and measured within a biospecimen.

(d) "Biospecimen" means a sample of human fluid, serum, or tissue that is reasonably available as a medium to measure the presence and concentration of chemicals or their metabolites in a human body.

(e) "Commissioner" means the commissioner of the Department of Health.

(f) "Community" means geographically or nongeographically-based populations that may participate in the biomonitoring program. A "nongeographical community" includes, but is not limited to, populations that may share a common chemical exposure through similar occupations, populations experiencing a common health outcome that may be linked to chemical exposures, or populations that may experience similar chemical exposures because of comparable consumption, lifestyle, product use, or subpopulations that share ethnicity, age, or gender.

(g) "Department" means the Department of Health.

(h) "Designated chemicals" means those chemicals that are known to, or strongly suspected of, adversely impacting human health or development, based upon scientific, peer-reviewed animal, human, or in vitro studies, and baseline human exposure data, and consist of those substances including chemical families or metabolites that are included in the federal Centers for Disease Control and Prevention studies that are known collectively as the National Reports on Human Exposure to Environmental Chemicals program and any substances as specified under section 144.998, subdivision 3, clause (6).

(i) " Environmental hazard" means a chemical, metal, or other substance for which scientific, peer-reviewed studies of humans, animals, or cells have demonstrated that the chemical is known or reasonably anticipated to adversely impact human health.

(j) "Environmental health tracking" means collection, integration, analysis, and dissemination of data on human exposures to chemicals in the environment and on diseases potentially caused or aggravated by those chemicals.

Sec. 3. **[144.996] ENVIRONMENTAL HEALTH TRACKING; BIOMONITORING.**

Subdivision 1. **Environmental health tracking.** The commissioner shall establish an environmental health tracking program to:

(1) coordinate data collection activities with the Minnesota Pollution Control Agency, Department of Agriculture, University of Minnesota, and any other relevant state agency and work to promote the sharing of and access to health and environmental databases in order to develop an environmental health tracking system for Minnesota, consistent with applicable data practices laws;

(2) facilitate the dissemination of public health tracking data to the public and researchers in accessible format and provide technical assistance on interpreting the data;

(3) develop written data sharing agreements with the Minnesota Pollution Control Agency, Department of Agriculture, and other relevant state agencies and organizations, and develop additional procedures as needed to protect individual privacy;

(4) develop a strategic plan that includes a mission statement, the identification of core priorities for research and epidemiologic surveillance, the identification of internal and external stakeholders, and a work plan describing future program development;

(5) organize, analyze, and interpret available data, in order to:

(i) characterize statewide and localized trends and geographic patterns of prevalence and incidence of chronic diseases, including, but not limited to, cancer, respiratory diseases, reproductive problems, birth defects, neurologic diseases, and developmental disorders;

(ii) recommend to the commissioner methods to improve data collection on statewide population rates of chronic diseases and the occurrence of environmental hazards and exposures;

(iii) characterize statewide and localized trends and geographic patterns in the occurrence of environmental hazards and exposures;

(iv) assess the level of correlation with disease rate data and indicators of exposure such as biomonitoring data, and other health and environmental data;

(v) incorporate newly collected and existing health tracking and biomonitoring data into efforts to identify communities with elevated rates of chronic disease, higher likelihood of exposure to environmental pollutants, or both;

(vi) analyze occurrence of environmental hazards, exposures, and diseases with relation to socioeconomic status, race, and ethnicity;

(vii) develop and implement targeted plans to conduct more intensive health tracking and biomonitoring among communities;

(viii) work with the Pollution Control Agency, the Department of Agriculture, and other relevant state agency personnel and organizations to develop, implement, and evaluate preventive measures to reduce elevated rates of diseases and exposures identified through activities performed under sections 144.995 to 144.998; and

(ix) provide baseline data and present descriptive information relevant to policy formation that are consistent with existing goals of the department; and

(6) submit a biennial report to the legislature by January 15, beginning January 15, 2009, on the status of environmental health tracking activities and related research

programs, and making recommendations regarding the continuation and improvement of the programs.

Subd. 2. **Biomonitoring.** The commissioner shall:

(1) conduct biomonitoring of communities on a voluntary basis by collecting and analyzing biospecimens, as appropriate, to assess environmental exposures to designated chemicals;

(2) conduct biomonitoring of pregnant women and minors on a voluntary basis, when scientifically appropriate;

(3) communicate findings to the public, and plan ensuing stages of biomonitoring and disease tracking work to further develop and refine the integrated analysis;

(4) share analytical results with the advisory panel and work with the panel to interpret results, communicate findings to the public, and plan ensuing stages of biomonitoring work; and

(5) submit a biennial report to the legislature by January 15, beginning January 15, 2009, on the status of the biomonitoring program and any recommendations for improvement.

Subd. 3. **Health data.** Data collected under the biomonitoring program are health data under section 13.3805.

Sec. 4. **[144.997] BIOMONITORING PILOT PROGRAM.**

Subdivision 1. **Pilot program.** With advice from the advisory panel, the commissioner shall develop a biomonitoring pilot program. The program shall collect one biospecimen from each of the voluntary participants. The biospecimen selected must be the biospecimen that most accurately represents body concentration of the chemical of interest. Each biospecimen from the voluntary participants must be analyzed for one type or class of related chemicals or metals, based on recommendations from the advisory panel. The panel shall determine the chemical or class of chemicals that community members were most likely exposed to. The program shall collect and assess biospecimens in accordance with the following:

(1) 30 voluntary participants from each of three communities that the advisory panel identifies as likely to have been exposed to a designated chemical;

(2) 100 voluntary participants from each of two communities: (i) that the advisory panel identifies as likely to have been exposed to arsenic and (ii) that the advisory panel identifies as likely to have been exposed to mercury; and

(3) 100 voluntary participants from each of two communities that the advisory panel identifies as likely to have been exposed to perfluorinated chemicals.

Subd. 2. **Base program.** Following the conclusion of the pilot program and within the appropriations available, the program shall:

(1) collect and assess biospecimens from at least as many voluntary participants and communities as identified in subdivision 1, clause (1); and

(2) work with the advisory panel to assess the usefulness of continuing biomonitoring among members of communities assessed during the initial phase of the program, and to identify other communities and other designated chemicals to be assessed via biomonitoring.

Subd. 3. **Participation.** (a) Participation in the biomonitoring program by providing biospecimens is voluntary and requires written, informed consent. Minors may participate in the program if a written consent is signed by the minor's parent or legal guardian. The written consent must include the information required to be provided under this subdivision to all voluntary participants.

(b) All participants shall be evaluated for the presence of the designated chemical of interest as a component of the biomonitoring process. Participants shall be provided with information and fact sheets about the program's activities and its findings. Individual participants shall, if requested, receive their complete results. Any results provided to participants shall be subject to the Department of Health Institutional Review Board protocols and guidelines. When either physiological or chemical data obtained from a participant indicate a significant known health risk, program staff experienced in communicating biomonitoring results shall consult with the individual and recommend follow-up steps, as appropriate. Program administrators shall receive training in administering the program in an ethical, culturally sensitive, participatory, and community-based manner.

Subd. 4. **Program guidelines.** (a) The commissioner, in consultation with the advisory panel, shall develop:

(1) protocols or program guidelines that address the science and practice of biomonitoring to be utilized and procedures for changing those protocols to incorporate new and more accurate or efficient technologies as they become available. The protocols shall be developed utilizing a peer-review process in a manner that is participatory and community-based in design, implementation, and evaluation;

(2) guidelines for ensuring the privacy of information; informed consent; follow-up counseling and support; and communicating findings to participants, communities, and the general public. The informed consent used for the program must meet the informed consent protocols developed by the National Institutes of Health;

(3) educational and outreach materials that are culturally appropriate for dissemination to program participants and communities. Priority shall be given to the development of materials specifically designed to ensure that parents are informed about all of the benefits of breast-feeding so that the program does not result in an unjustified fear of toxins in breast milk, which might inadvertently lead parents to avoid breast-feeding. The materials shall communicate relevant scientific findings; data on the accumulation of pollutants to community health; and the required responses by local, state, and other governmental entities in regulating toxicant exposures;

(4) a training program that is culturally sensitive specifically for health care providers, health educators, and other program administrators;

(5) a designation process for state and private laboratories that are qualified to analyze biospecimens and report the findings; and

(6) a method for informing affected communities and local governments representing those communities concerning biomonitoring activities and for receiving comments from citizens concerning those activities.

(b) The commissioner may enter into contractual agreements with health clinics, community-based organizations, or experts in a particular field to perform any of the activities described under this section.

Sec. 5. **[144.998] ENVIRONMENTAL HEALTH TRACKING AND BIOMONITORING ADVISORY PANEL.**

Subdivision 1. **Creation.** The commissioner shall establish the Environmental Health Tracking and Biomonitoring Advisory Panel. The commissioner shall appoint, from the panel's membership, a chair. The panel shall meet as often as it deems necessary but, at a minimum, on a quarterly basis. Members of the panel shall serve without compensation but shall be reimbursed for travel and other necessary expenses incurred through performance of their duties. Members appointed under this subdivision are appointed for a three-year term and may be reappointed.

Subd. 2. **Members.** The commissioner shall appoint eight members who have backgrounds or training in designing, implementing, and interpreting health tracking and biomonitoring studies or in related fields of science, including epidemiology, biostatistics, environmental health, laboratory sciences, occupational health, industrial hygiene, toxicology, and public health, including:

(1) two scientists who represent nongovernmental organizations with a focus on environmental health, environmental justice, children's health, or on specific chronic diseases; and

(2) one scientist who is a representative of the University of Minnesota.

The commissioner shall also appoint one member representing each of the following departments or divisions: the department's health promotion and chronic disease division, the Pollution Control Agency, and the Department of Agriculture.

Subd. 3. **Duties.** The advisory panel shall make recommendations to the commissioner and the legislature on:

(1) priorities for health tracking;

(2) priorities for biomonitoring that are based on sound science and practice, and that will advance the state of public health in Minnesota;

(3) specific chronic diseases to study under the environmental health tracking system;

(4) specific environmental pollutant exposures to study under the environmental health tracking system;

(5) specific communities and geographic areas on which to focus environmental health tracking and biomonitoring efforts;

(6) specific chemicals and metals to study under the biomonitoring program that meet the following criteria:

(i) the degree of potential exposure to the public or specific subgroups, including, but not limited to, occupational;

(ii) the likelihood of a chemical being a carcinogen or toxicant based on peer-reviewed health data, the chemical structure, or the toxicology of chemically related compounds;

(iii) the limits of laboratory detection for the chemical, including the ability to detect the chemical at low enough levels that could be expected in the general population;

(iv) exposure or potential exposure to the public or specific subgroups;

(v) the known or suspected health effects resulting from the same level of exposure based on peer-reviewed scientific studies;

(vi) the need to assess the efficacy of public health actions to reduce exposure to a chemical;

(vii) the availability of a biomonitoring analytical method with adequate accuracy, precision, sensitivity, specificity, and speed;

(viii) the availability of adequate biospecimen samples; and

(ix) other criteria that the panel may agree to; and

(7) other aspects of the design, implementation, and evaluation of the environmental health tracking and biomonitoring system, including, but not limited to:

(i) identifying possible community partners and sources of additional public or private funding;

(ii) developing outreach and educational methods and materials; and

(iii) disseminating environmental health tracking and biomonitoring findings to the public.

Subd. 4. **Liability.** No member of the panel shall be held civilly or criminally liable for an act or omission by that person if the act or omission was in good faith and within the scope of the member's responsibilities under sections 144.995 to 144.998.

Sec. 6. **INFORMATION SHARING.**

On or before August 1, 2007, the commissioner of health, the Minnesota Pollution Control Agency, the commissioner of agriculture, and the University of Minnesota are requested to jointly develop and sign a memorandum of understanding declaring their intent to share new and existing environmental hazard, exposure, and health outcome data, consistent with applicable data practices laws, and to cooperate and communicate effectively to ensure sufficient clarity and understanding of the data between these organizations.

Sec. 7. **APPROPRIATION.**

(a) $..... in fiscal year 2008 and $..... in fiscal year 2009 are appropriated from the general fund to the Department of Health for the environmental health tracking and biomonitoring program.

(b) $..... in fiscal year 2008 and $..... in fiscal year 2009 are appropriated from the state government special revenue fund to the Department of Health for the health tracking and biomonitoring program.