## **HOUSE BILL No. 4651**

March 26, 1991, Introduced by Reps. Scott, Kosteva, Alley, Middaugh and Sikkema and referred to the Committee on Conservation, Recreation and Environment.

A bill to amend Act No. 245 of the Public Acts of 1929, entitled as amended

"An act to regulate, protect, and conserve the water resources of the state, to provide for the control over the pollution of any waters of the state and the Great Lakes, to provide for the control over the alteration of the watercourses and the floodplains of all rivers and streams; to create a water resources commission; to prescribe the powers and duties of certain state agencies and officials; to require the registration of manufacturing products, production materials, and waste products where certain wastes are discharged; to require permits to regulate the discharge or storage of any substance which may affect the quality of the waters of the state and to establish restrictions to assure compliance with applicable state standards and to authorize the establishment of permit restrictions and programs to assure compliance with applicable federal law and regulations; to prohibit the pollution of any waters of the state and the Great Lakes; to prohibit the obstruction of the floodways of the rivers and streams of the state; to designate the department of natural resources as the state agency to cooperate and negotiate with other governments and agencies in matters concerning the water resources of the state; and to provide penalties and remedies for the violation of this act,"

as amended, being sections 323.1 to 323.12a of the Michigan Compiled Laws, by adding sections 2b, 2c, 2d, 2e, 2f, and 2g.

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## THE PEOPLE OF THE STATE OF MICHIGAN ENACT:

- 1 Section 1. Act No. 245 of the Public Acts of 1929, as
- 2 amended, being sections 323.1 to 323.12a of the Michigan Compiled
- 3 Laws, is amended by adding sections 2b, 2c, 2d, 2e, 2f, and 2g to
- 4 read as follows:
- 5 SEC. 2B. AS USED IN SECTIONS 2C, 2D, 2E, 2F, AND 2G:
- 6 (A) "ADL" OR "ALLOWABLE DISCHARGE LEVEL" MEANS CONCENTRATION
- 7 LIMITATIONS FOR DISCHARGES TO GROUNDWATER ESTABLISHED BY THE
- 8 DIRECTOR PURSUANT TO GUIDELINES ADOPTED BY THE COMMISSION
- 9 SECTION 2C, OR DIRECTLY ESTABLISHED BY THE COMMISSION.
- 10 (B) "AQUIFER" MEANS UNDERGROUND WATER-BEARING EARTH MATERI-
- 11 ALS THROUGH WHICH GROUNDWATER MOVES IN SUFFICIENT QUANTITY TO
- 12 SERVE AS A SOURCE OF WATER SUPPLY.
- 13 (C) "CARCINOGEN" MEANS A SUBSTANCE THAT CAUSES AN INCREASED
- 14 INCIDENCE OF BENIGN OR MALIGNANT NEOPLASMS OR A SUBSTANTIAL
- 15 DECREASE IN THE LATENCY PERIOD BETWEEN EXPOSURE AND ONSET OF NEO-
- 16 PLASMS IN AT LEAST | MAMMALIAN SPECIES, OR HUMAN BEINGS.
- 17 EXPOSURE MAY BE ORAL OR DERMAL. EXPOSURE MAY ALSO BE BY INHALA-
- 18 TION WHEN NEOPLASMS OCCUR AT NONRESPIRATORY SITES OR, IF CONSID-
- 19 ERED APPROPRIATE BY THE COMMISSION, WHEN NEOPLASMS OCCUR AT RES-
- 20 PIRATORY SITES. IF THE COMMISSION, ON THE BASIS OF CREDIBLE SCI-
- 21 ENTIFIC EVIDENCE, DETERMINES THAT THERE IS SIGNIFICANT UNCER-
- 22 TAINTY REGARDING THE CREDIBILITY, VALIDITY, OR SIGNIFICANCE OF
- 23 AVAILABLE DATA REGARDING CARCINOGENICITY, IT SHALL REFER THE
- 24 OUESTION OF CARCINOGENICITY TO EXPERTS IN THE FIELD OF CARCINOGE-
- 25 NESIS AND SHALL CONSIDER THE RECOMMENDATION OF THOSE EXPERTS IN
- 26 MAKING A FINAL DETERMINATION.

- (D) "DISCHARGE" MEANS THE ADDITION OF MATERIALS TO
- 2 GROUNDWATER FROM A PERSON BY A POINT SOURCE, SEEPAGE, OR PERCOLA-
- 3 TION THROUGH THE SOIL.
- 4 (E) "GENOTOXIC TERATOGEN" MEANS A SUBSTANCE THAT IS ALL OF
- 5 THE FOLLOWING:
- 6 (i) POSITIVE IN A BATTERY OF TESTS FOR GENE MUTATION, WITH
- 7 OR WITHOUT METABOLIC ACTIVATION.
- 8 (ii) ITS GENOTOXIC METABOLITES ARE PLACENTALLY TRANSFERRED
- 9 IN 1 OR MORE MAMMALIAN SPECIES.
- 10 (iii) IT ELICITS A TERATOGENIC RESPONSE WHEN ADMINISTERED
- 11 ORALLY, DERMALLY, OR BY INHALATION IN 1 OR MORE MAMMALIAN
- 12 SPECIES.
- 13 (F) "GERM-LINE MUTAGEN" MEANS A SUBSTANCE THAT MAY CAUSE A
- 14 HERITABLE CHANGE IN THE GENOME OF THE GERMINAL CELLS THROUGH
- 15 ORAL, DERMAL, OR INHALATION EXPOSURE IN 1 OR MORE MAMMALIAN
- 16 SPECIES.
- 17 (G) "GROUNDWATER" MEANS UNDERGROUND WATERS WITHIN THE ZONE
- 18 OF SATURATION.
- 19 (H) "HUMAN LIFE CYCLE SAFE CONCENTRATION" MEANS THE HIGHEST
- 20 CONCENTRATION OF A CHEMICAL ACTING BY A THRESHOLD MECHANISM TO
- 21 WHICH HUMANS ARE EXPOSED CONTINUOUSLY FOR A LIFETIME THAT IS NOT
- 22 EXPECTED TO RESULT IN ADVERSE EFFECTS TO AN INDIVIDUAL OR TO THE
- 23 PROGENY OF AN INDIVIDUAL.
- 24 (I) "INCREASED CANCER RISK OF 1 IN 1,000,000" MEANS THE 95%
- 25 UPPER BOUND ON RISK OF 1 ADDITIONAL CANCER ABOVE THE BACKGROUND
- 26 CANCER RATE PER 1,000,000 INDIVIDUALS EXPOSED.

- 1 (J) "SECONDARY DRINKING WATER STANDARDS" OR "SDWS" MEANS
- 2 SDWS ESTABLISHED PURSUANT TO THE SAFE DRINKING WATER ACT, TITLE
- 3 XIV OF THE PUBLIC HEALTH SERVICE ACT, CHAPTER 373, 88 STAT. 1660,
- 4 42 U.S.C. 300f TO 300j-3, 300j-4 TO 300j-9, 300j-11, AND 300j-21
- 5 TO 300j-25, FOR SUBSTANCES THAT MAY ADVERSELY AFFECT THE TASTE,
- 6 ODOR, COLOR, APPEARANCE, OR THE AESTHETIC QUALITY OF DRINKING
- 7 WATER.
- 8 (K) "STANDARD" MEANS A GROUNDWATER QUALITY STANDARD ESTAB-
- 9 LISHED PURSUANT TO SECTION 2C.
- 10 (1) "SUBSTANCE" MEANS ANY SOLID, LIQUID, SEMISOLID, DIS-
- 11 SOLVED SOLID, OR GASEOUS MATERIAL, NATURALLY OCCURRING OR
- 12 HUMAN-MADE CHEMICAL, PARAMETER FOR MEASUREMENT OF WATER QUALITY,
- 13 VIRUS OR BIOLOGICAL ORGANISM THAT, IN ITS ORIGINAL FORM, OR AS A
- 14 METABOLITE OR A DEGRADATION OR WASTE PRODUCT, MAY DECREASE THE
- 15 QUALITY OF GROUNDWATER.
- 16 (M) "TOTAL INORGANIC NITROGEN" MEANS THE TOTAL OF AMMONIA
- 17 PLUS NITRATE PLUS NITRITE, EXPRESSED AS NITROGEN.
- 18 (N) "USABLE AQUIFER" MEANS AN AQUIFER, OR THAT PORTION OF AN
- 19 AQUIFER OR AQUIFER SYSTEM, THAT IS CAPABLE OF PROVIDING WATER IN
- 20 SUFFICIENT QUANTITY AND OF SATISFACTORY QUALITY TO SERVE 1 OR
- 21 MORE HUMAN USES. USABLE AQUIFERS DO NOT INCLUDE AQUIFERS THAT
- 22 ARE RESERVOIRS REGULATED BY THE MINERAL WELL ACT, ACT NO. 315 OF
- 23 THE PUBLIC ACTS OF 1969, BEING SECTIONS 319.211 TO 319.236 OF THE
- 24 MICHIGAN COMPILED LAWS, OR ACT NO. 61 OF THE PUBLIC ACTS OF 1939,
- 25 BEING SECTIONS 319.1 TO 319.27 OF THE MICHIGAN COMPILED LAWS.

- 1 SEC. 2C. (1) THE COMMISSION SHALL ESTABLISH GROUNDWATER
- 2 QUALITY STANDARDS THAT ARE AT LEAST AS STRINGENT AS ALL OF THE
- 3 FOLLOWING:
- 4 (A) THE 1 IN 1,000,000 TOTAL CANCER RISK FOR CARCINOGENS
- 5 THAT ARE NOT DETERMINED TO CAUSE CANCER BY A THRESHOLD
- 6 MECHANISM.
- 7 (B) THE HUMAN LIFE CYCLE SAFE CONCENTRATION FOR SUBSTANCES
- 8 THAT ARE DETERMINED NOT TO CAUSE CANCER, OR TO BE A GENOTOXIC
- 9 TERATOGEN OR A GERM LINE MUTAGEN.
- 10 (C) LEVELS PROTECTIVE OF PUBLIC HEALTH FOR CARCINOGENS
- 11 DETERMINED TO CAUSE CANCER BY A THRESHOLD MECHANISM.
- 12 (D) LEVELS PROTECTIVE OF PUBLIC HEALTH FOR SUBSTANCES WHICH
- 13 ARE A GENOTOXIC TERATOGEN OR A GERM LINE MUTAGEN.
- 14 (2) IN ESTABLISHING THE GROUNDWATER QUALITY STANDARDS UNDER
- 15 SUBSECTION (1), THE COMMISSION SHALL UTILIZE THE BEST AVAILABLE
- 16 DATA AND EXPERTISE.
- 17 (3) THE COMMISSION SHALL ADOPT GUIDELINES PURSUANT TO THE
- 18 ADMINISTRATIVE PROCEDURES ACT OF 1969, ACT NO. 306 OF THE PUBLIC
- 19 ACTS OF 1969, BEING SECTIONS 24.201 TO 24.328 OF THE MICHIGAN
- 20 COMPILED LAWS, SETTING FORTH PROCEDURES TO BE USED BY THE DIREC-
- 21 TOR IN DEVELOPING STANDARDS INCLUDING THE MINIMUM DATA NECESSARY
- 22 TO DERIVE HUMAN LIFE CYCLE SAFE CONCENTRATIONS OR UPPER BOUNDS ON
- 23 THE CARCINOGEN RISK VALUES.
- 24 (4) WHEN DEVELOPING STANDARDS IN ACCORDANCE WITH THE ADOPTED
- 25 GUIDELINES, THE DIRECTOR SHALL DOCUMENT IN WRITING THE INFORMA-
- 26 TION AND METHODOLOGY USED, AND THE CONCLUSIONS REACHED IN
- 27 DETERMINING THE STANDARD. IF ADEQUATE DATA IS NOT AVAILABLE TO

- 1 DERIVE AN ALLOWABLE DISCHARGE LEVEL, THE DIRECTOR OR THE
- 2 COMMISSION SHALL REQUIRE THE PERMIT APPLICANT TO PROVIDE THE NEC-
- 3 ESSARY INFORMATION.
- 4 SEC. 2D. (1) THE COMMISSION SHALL ESTABLISH ALLOWABLE DIS-
- 5 CHARGE LEVELS OF SUBSTANCES TO GROUNDWATER IN ACCORDANCE WITH THE
- 6 FOLLOWING:
- 7 (A) FOR SUBSTANCES THAT HAVE A SECONDARY DRINKING WATER
- 8 STANDARD, THE ADL SHALL BE 100% OF THAT ESTABLISHED STANDARD. IF
- 9 A PARAMETER IN THE ORIGINAL SOURCE OF WATER SUPPLY UNIMPACTED BY
- 10 DISCHARGE EVENTS OR ACTIVITIES EXCEEDS THE SDWS, THE ADL SHALL BE
- 11 THE BACKGROUND LEVEL OF THE CONSTITUENT PLUS A 10% INCREASE.
- 12 (B) FOR SUBSTANCES THAT MEET THE CRITERIA DESCRIBED IN
- 13 SECTION 2C(1)(B), THE ADL SHALL NOT EXCEED 20% OF THE ESTABLISHED
- 14 STANDARD.
- 15 (C) FOR SUBSTANCES THAT MEET THE CRITERIA DESCRIBED IN
- 16 SECTION 2C(1)(A), THE ADL SHALL NOT EXCEED 10% OF THE ESTABLISHED
- 17 STANDARD AND THE TOTAL COMBINED CANCER RISK ESTIMATE SHALL NOT
- 18 EXCEED AN INCREASED CANCER RISK OF | IN 1,000,000 RISK LEVEL ON
- 19 AN ADDITIVE BASIS.
- 20 (D) FOR SUBSTANCES THAT MEET THE CRITERIA DESCRIBED IN SEC-
- 21 TION 2C(1)(C) AND (D), THE ADL SHALL NOT EXCEED 10% OF THE ESTAB-
- 22 LISHED STANDARD.
- 23 (2) THE COMMISSION MAY ESTABLISH AN ADL FOR A SUBSTANCE THAT
- 24 IS LOWER THAN THE LEVEL SPECIFIED UNDER SUBSECTION (1) IF THE
- 25 COMMISSION CONCLUDES THAT A MORE STRINGENT LEVEL IS NECESSARY TO
- 26 PROTECT THE PUBLIC HEALTH, SAFETY, OR WELFARE FROM THE
- 27 INTERACTIVE EFFECTS OF THE SUBSTANCE OR WHERE A GREATER DEGREE OF

- 1 PROTECTION IS CURRENTLY BEING ACHIEVED OR CAN BE ACHIEVED THROUGH
- 2 UTILIZATION OF CONTROL MEASURES ALREADY IN PLACE.
- 3 (3) THE ADL SHALL APPLY TO THE DISCHARGE BEFORE APPLICATION
- 4 ONTO SOIL OR MIXING WITH GROUNDWATER.
- 5 (4) EVEN IF ALLOWABLE DISCHARGE LIMITS ARE OR CAN BE MET BY
- 6 A PERSON, THE COMMISSION MAY DENY A DISCHARGE INTO THE GROUNDWA-
- 7 TER AT A LOCATION WHERE AN AVAILABLE PUBLIC SANITARY SEWER SYSTEM
- 8 ABUTS THE PROPERTY AND THE COMMISSION DETERMINES THE PUBLIC SEWER
- 9 SYSTEM AND THE RECEIVING WASTEWATER TREATMENT PLANT HAVE ADEQUATE
- 10 CAPACITY AND CAPABILITY TO PROCESS THE SUBSTANCE EITHER WITH OR
- 11 WITHOUT PRETREATMENT. IF THE COMMISSION DETERMINES THAT THE
- 12 PUBLIC SEWER SYSTEM AND THE WASTEWATER TREATMENT PLANT HAVE SUCH
- 13 CAPACITY AND CAPABILITY, THE OWNERS AND OPERATORS OF THESE FACIL-
- 14 ITIES SHALL BE BOUND BY THE DETERMINATION OF THE COMMISSION.
- 15 SEC. 2E. THE PROVISIONS OF SECTIONS 2C AND 2D DO NOT APPLY
- 16 TO AMMONIA, NITRATE, AND NITRITE NITROGEN. THE CONCENTRATION OF
- 17 TOTAL INORGANIC NITROGEN IN A DISCHARGE TO A USABLE AQUIFER SHALL
- 18 NOT EXCEED 5.0 MILLIGRAMS PER LITER. THE COMMISSION MAY LOWER
- 19 THIS LIMIT THROUGH THE PROMULGATION OF RULES IF THE COMMISSION
- 20 DETERMINES THAT IMPROVED TECHNOLOGY OR MANAGEMENT PRACTICES ARE
- 21 REASONABLY AVAILABLE.
- 22 SEC. 2F. THE COMMISSION MAY AUTHORIZE DISCHARGES TO GROUND-
- 23 WATER THAT DO NOT COMPLY WITH SECTIONS 2C TO 2E IF ANY OF THE
- 24 FOLLOWING CIRCUMSTANCES EXIST:
- 25 (A) THE DISCHARGE IS MADE TO THE LAND SURFACE IN A CON-
- 26 TROLLED MANNER SUCH THAT ADDITIONAL TREATMENT WILL BE PROVIDED BY
- 27 PLANT OR SOIL UPTAKE OF POLLUTANTS OR THROUGH OTHER SOIL

- 1 TREATMENT MECHANISMS AS SPECIFIED IN A PERMIT ISSUED BY THE
- 2 DIRECTOR.
- 3 (B) THE DISCHARGE IS PART OF A GROUNDWATER CLEANUP ACTIVITY
- 4 APPROVED BY THE DIRECTOR, OR THE DIRECTOR'S DESIGNATED REPRESEN-
- 5 TATIVE AND THE DISCHARGE OCCURS TO CONTAMINATED GROUNDWATER THAT
- 6 IS BEING TREATED.
- 7 (C) THE DISCHARGE IS LAWFULLY OCCURRING ON THE EFFECTIVE
- 8 DATE OF THIS SECTION.
- 9 SEC. 2G. (1) A PERSON LAWFULLY DISCHARGING TO GROUNDWATER
- 10 ON THE EFFECTIVE DATE OF THIS SECTION MAY CONTINUE TO DISCHARGE
- 11 UNTIL THE COMMISSION MAKES A FINAL DECISION ON THE PERSON'S DIS-
- 12 CHARGE PERMIT APPLICATION OR THE COMMISSION PROMULGATES RULES
- 13 THAT DIRECTLY REGULATE THE CLASS OR TYPE OF DISCHARGE.
- 14 (2) THE COMMISSION MAY ESTABLISH A SCHEDULE IN A PERMIT OR
- 15 RULE UNDER WHICH A DISCHARGE DESCRIBED IN THIS SECTION SHALL COME
- 16 INTO COMPLIANCE WITH THIS ACT.