

FINAL REPORT

Environmental Quality Service Council

I. STATUTORY AND LEGISLATIVE COUNCIL DIRECTIVES

The Indiana General Assembly enacted P.L.12-2005 (SEA 44) directing the Environmental Quality Service Council (EQSC) to do the following:

- (1) Study issues designated by the Legislative Council.
- (2) Advise the commissioner on policy issues decided on by the Council.
- (3) Review the mission and goals of the Department of Environmental Management and evaluate the implementation of the mission.
- (4) Serve as a council of the General Assembly to evaluate:
 - (A) resources and structural capabilities of the department to meet the department's priorities; and
 - (B) program requirements and resource requirements for the department.
- (5) Serve as a forum for citizens, the regulated community, and legislators to discuss broad policy directions.
- (6) Submit a final report to the Legislative Council, in an electronic format under IC 5-14-6, that contains at least the following:
 - (A) An outline of activities of the Council.
 - (B) Recommendations for department action.
 - (C) Recommendations for legislative action.

The Legislative Council also directed the EQSC to study the following topics:

- (1) Environmental funds (SB169).
- (2) Mercury recovery issues (SB 169).
- (3) Confined feeding operations (SR 36, SB 123).
- (4) Biofuels: agricultural-based alternatives to petroleum fuels (HB 1033).

II. INTRODUCTION AND REASONS FOR STUDY

The activities of the EQSC in 2005 were conducted to discharge the EQSC's various responsibilities under P.L. 12-2005 (SEA 44) and topics assigned by the Legislative Council.

III. SUMMARY OF WORK PROGRAM

The EQSC met six times on the following dates at the following locations to consider the indicated topics:

July 19, 2005	Conference Room B 302 W. Washington St. Indianapolis, Indiana	Brownfields issues, mercury recovery from switches
August 9, 2005	Conference Room C 302 W. Washington St. Indianapolis, Indiana	State cleanup programs and brownfields, State Revolving Fund, underground storage tanks
September 13, 2005	Conference Room C 302 W. Washington St. Indianapolis, Indiana	Confined feeding operations
September 29, 2005	Conference Room C 302 W. Washington St. Indianapolis, Indiana	Energy issues
October 12, 2005	Conference Room C 302 W. Washington St. Indianapolis, Indiana	Environmental funds
October 26, 2005	Conference Room C 302 W. Washington St. Indianapolis, Indiana	Adoption of recommendations and final report

IV. SUMMARY OF TESTIMONY

First Meeting - July 19, 2005

Commissioner's Report - Tom Easterly, Commissioner of IDEM, presented the Commissioner's Report, which included the following: EQSC Power Point presentation; IDEM Office of Water Quality Streamlined Rulemaking Schedule, July 2005; Air Board Rules Update, July 2005; Office of Land Quality Rulemaking Projects 2005-2006; and an IDEM Organizational Structure Chart.

Brownfields Update - Michelle Oertel, IDEM, provided an update on brownfield redevelopment projects across the state and Calvin Kelly, Indiana Finance Authority (IFA), described new brownfield redevelopment initiatives between IDEM and IFA. Mr. Kelly also spoke about the following: Brownfield Tax Credit and the amount of the credit remaining to be used; who provides the environmental insurance and to whom it is issued; and if there is any loss to the state General Fund. It was noted that a new, single, office is being created to combine IDEM's and IFA's brownfield redevelopment efforts.

Mercury Recovery from Switches - Mr. Easterly presented IDEM's overview of mercury switches in Indiana, which addressed the following: costs of mercury switch removal; state bounty programs; state volunteer programs; and options for state action. Mr. Easterly noted removal of mercury switches is not mandatory in Indiana. However, there are environmental consequences if they are not removed before automobiles are demolished for recycling.

David Sulc, Nucor Steel, made a presentation that discussed the following: the role of the Partnership for Mercury Free Vehicles (PMFV) in removing mercury switches from vehicles before they are recycled; the number of vehicles recycled and amount of scrap recovered in the United States; the costs for mercury switch removal; the responsibility for removal of mercury switches; state bounty systems; and industry incentives.

Michelle Lechner, Automotive Recyclers of Indiana, discussed Arkansas' and Wisconsin's bounty systems, funding sources for bounty systems, and costs and length of time for mercury switch removal. Ms. Lechner noted it cannot be assured that all mercury switches are removed from a vehicle before recycling for various reasons, and liability is a concern of recyclers.

Kasimer Andary, Alliance of Automobile Manufacturers, discussed the dismantling process of vehicles and various facts on convenience switches. He also explained how the use of mercury in automobile manufacturing was prohibited in Europe, why manufacturers in the United States stopped using mercury, and why attempts to remedy the responsibility problem have failed.

Second Meeting - August 9, 2005

State Cleanup Programs and Brownfields - Bruce Oertel, IDEM, presented an overview of the Office of Land Quality's cleanup programs. The overview consisted of IDEM's remediation process, voluntary vs. enforcement, site investigation, and state and federal cleanup programs. Mr. Oertel also discussed the possibility of consolidating or standardizing the cleanup process, covenants not to sue, and comfort letters as used in brownfield cleanups, as well as EPA's memorandum of agreement with IDEM.

Jim McGoff, IDEM & IFA, discussed the use of comfort letters in remediation projects and noted the IDEM and IFA brownfield program is looking for ways to strengthen comfort letters and that comfort letters are added to property deeds.

Kathy Lucas, Bose, McKinney & Evans, presented an overview of liability issues associated with brownfields, which included: joint and several liability; Environmental Legal Action (ELA); Small Business Liability Relief & Brownfields Revitalization Act; and liability protections provided in HEA 1033-2005.

Bob West, ES&E, provided further information on brownfields and cleanup programs in relation to urban revitalization and cleanups; challenges to cleanups; liability insurance; and insured fixed price cleanups. Mr. West also noted the availability and affordability of insurance depends on the knowledge of the site to be remediated and the level of contamination.

Underground Storage Tank Program - Scott Imus, Indiana Petroleum Marketers and Convenience Store Association, discussed the following in regards to IDEM's Environmental Liability Trust Fund (ELTF): improvements in the Fund; legislation supporting the Fund, and the processing of claims and issuing of permits in a timely manner. He also addressed the federal energy bill, possibility of funding for mandates on tank owners, and the issuance of notification letters to landowners surrounding a contaminated area.

Bruce Palin, IDEM, **presented to the Council: *Leaking Underground Storage Tanks: Report to EQSC and Leaking Underground Storage Tank Program (Appendices A & B)***. The presentations included program responsibilities and resources; program status and funding; and ELTF status. He also discussed the amount of money in the Fund that is used for cleanups and the issuance of notification letters to landowners surrounding a contaminated area.

State Revolving Fund - Jim McGoff, SRF Executive Director, presented to the Council: State Revolving Loan Fund Programs: Summary of State Fiscal Year 2005 and an overview of SRF borrowers and projects (Appendices C & D), which included: the types of projects funded by the program; and financing terms and savings for borrowers. He also talked over the amount of money that may go to nonpoint source pollution projects and the amount of money that has been used for security projects.

Matt Greller, Indiana Association of Cities and Towns, presented the results of a SRF survey, to which 30 cities and towns responded.

Third Meeting - September 13, 2005

Confined Feeding Operations - Senator Dillon addressed the Council with issues regarding confined feeding operations (CFOs), referencing an email from Mr. Bob Patterson representing Andrews Concerned Citizens. Issues in the email related to CFOs and permit issuance and retention, pollution effects and control, animal waste containment, application, monitoring and control, and penalties.

Tom Easterly provided information on CFOs and concentrated animal feeding operations (CAFOs) as they relate to IDEM and state and federal regulations. He also discussed permit writers' receptiveness to new management practices, general nuisance laws, and IDEM's Section 319 Nonpoint Source Pollution Program grant money.

Andy Miller, Director, Indiana State Department of Agriculture (ISDOA), presented the Department's strategic plan for making Indiana a global leader in food and agriculture innovation. Mr. Miller discussed the priority of new management technologies.

David Robb, Trader's Point Creamery, addressed the Council with a description of the organic farm and its business market. Mr. Robb explained the driving forces of the market and noted that markets are changing and long term impacts on the environment must be taken into consideration. Mr. Robb also discussed how complying with state regulations is hard because they are standardized for larger businesses.

Janet McCabe, Improving Kid's Environment, made a presentation on air emissions from confined animal feeding operations and discussed quantifying odor, California's Title V requirements, and the Health Association's moratorium.

Cal Jackson, representing the poultry industry, Joe Kelsay, representing the dairy/beef industry, Joe Meyer, representing the grain industry, and Mark Legan, representing the pork industry, all described their respective farms and their relation to CFO issues. They also discussed various obstacles to using new management technologies.

Lance Price, Johns Hopkins Bloomberg School of Public Health, made a presentation on public health implications of industrial animal production.

Kathy Martin, Martin Environmental Services, presented technical information on the chemical makeup of manure and its affects on the environment.

Four Purdue University professors made technical presentations on various CFO issues to the Council. Included were the following:

Brad Joern, Department of Agronomy, presented on nutrient management planning and

implementation.

Don Jones, Department of Agriculture and Biological Engineering, presented on innovations in manure treatments.

Al Heber, Department of Agriculture and Biological Engineering, presented on livestock air emissions and air quality.

Al Sutton, Department of Animal Science, presented on animal feed impacts on the environment.

Fourth Meeting - September 29, 2005

Energy Issues - Andy Miller made a presentation on the state's bioenergy strategy, which is to make Indiana a leader in bioenergy production and innovation in the United States. He included information on bioenergy attributes, production, promotion, education and usage; state initiatives; research and development; 2005 Clean Energy Bill and possible state legislation; and the BioTown, USA, program.

Mr. Miller discussed the cost of an ethanol pump; ISDOA's legislative agenda, and including incentives for ethanol production and pumps; ISDOA's collaboration with General Motors on purchasing incentives for flexible fuel vehicles; and fuel efficiency and cost compared to gasoline.

Dr. Bowen, Center for Coal Technology Research (CCTR), Purdue University, presented information on clean coal technologies. Dr. Bowen discussed the transition of clean coal technologies from the research stage to the market and the need for a large scale test center to study challenges on a large commercial scale.

Dr. Ladisch, Purdue, presented information on bioenergy sources in Indiana and discussed using other plant sources for bioenergy, including biograss, and the percentage of the market that will be using bioenergy in 15 years.

Dr. Tao, Department of Agriculture and Biological Engineering, Purdue University, spoke on benefits and limitations of using soybean biodiesel as a replacement fuel for jet aviation and discussed the infrastructure issues associated with transporting the alternative fuel.

Dr. Turco, Department of Agronomy, Purdue University, made a presentation on converting methane into a usable energy source and noted the technology is already being implemented in North Carolina.

Eric Holdsworth, Edison Electric Institute, provided an overview of the Energy Policy Act of 2005 and discussed the techniques the Act uses to encourage use of new or alternative technologies and the amount of assistance directed to utilities for reducing emissions.

John Stowell, Cinergy Corporation, made a presentation on using the Integrated Gasification Combined Cycle (IGCC) technology. The presentation covered the environmental benefits of using the technology and financial incentives provided by state and federal legislation. He also discussed how long the technology will be considered state-of-the-art, the amount of CO₂ produced in the process, and the use of biograss by the technology.

James Davis, Waste Management, spoke on using landfill gas as a renewable energy. The presentation covered the process of converting landfill gas, which is generally 50% methane and 45% carbon dioxide, into an energy source. Mr. Davis noted the economics of producing

the energy is the biggest barrier because we have a low cost power source already.

Gary Drook, Central Indiana Ethanol, provided the Council with information on ethanol production, including: oil refining capacity in the U.S.; ethanol production capacity in the U.S. vs. Indiana; corn as a value-added agriculture; and suggestions for Indiana to increase use of ethanol.

Belinda Puetz and Melanie Batalis, Indiana Soybean Growers Association, provided an overview of the use of biofuels in Indiana, including: a biodiesel and ethanol fuel analysis; farmer investments; and a policy agenda that consisted of eliminating the cap on biodiesel retail tax credit, requiring B20 biodiesel in non-attainment areas, using E85 ethanol pump installation tax credits, labeling ethanol pumps, and using an E10 statewide renewable fuel standard.

Vince Griffin, Indiana Chamber of Commerce, spoke on using waste tires as a source of energy. In his presentation, Mr. Griffin spoke on expanding markets and legitimate end uses, energy recovery, use as aggregate substitute, increasing state tire fee, incentive programs, and benefits to waste tire reuse.

Fred Major, Indiana Automotive Wholesalers Association, noted to the Council that recycling should be supported and brought into the economic mainstream.

Fifth Meeting - October 12, 2005

Commissioner's Report - Tom Easterly presented the Commissioner's Report, which included updates on the following topics: combined sewer overflows; air quality/non-attainment issues - Inspection and Maintenance program; electronic reporting and Digital Inspector; issued permits; enforcement; legislative issues; and rulemaking.

Environmental Funds - Mr. Easterly provided the Council with the IDEM report *Dedicated Funds: History and Overview*. For each of the dedicated funds, the report provided the following information: purpose and uses of the fund; revenue sources, such as fees, general funds, and federal funds; and revenue, expenses, and balance history. Mr. Easterly also addressed the following topics: use of the Excess Liability Trust Fund for agency-wide services; transfers to the Environmental Remediation Loan Fund; priority of paying claims from funds; reimbursements to consulting companies and land owners; goals and objectives: eliminate permit backlogs, eliminate waste tires; and adequacy of fee levels for funding requirements.

Jim McGoff, IDEM/Indiana Finance Authority, addressed the dedicated funds that are assigned to the Indiana Finance Authority. He also addressed the following topics: federal funding, City of Indianapolis projects, and establishment of ability-to-pay.

Public Discussion - Tom Boyle, Boyle & Associates, recommended to the Council that incentives be used to encourage the building of ethanol plants in Indiana. He also suggested that the state require a mandatory blending of at least 10 percent ethanol in gasoline and fix the tax credit language in statute. Mr. Boyle noted that biodiesel should be included as well.

Maggie McShane, Indiana Petroleum Council, noted that the Financial Assurance Board approved new rules that tightened eligibility requirements, the Indiana Petroleum Council will be meeting with the Department of Revenue in regards to fee revenue not being deposited in IDEM dedicated funds, and recommended the state ease the mandate of high percentage blending of ethanol in gasoline as it requires costly investments to change infrastructure.

Rae Schnapp, Hoosier Environmental Council, recommended that the state needs to keep the Ground Water Task Force active.

Sixth Meeting - October 26, 2005

Followup on Questions from Oct. 12 Meeting - Linda Dollens, Department of Revenue, informed the Council of why the increased gasoline and new diesel inspection fee collections have not yet been deposited in the ELTF. The two main reasons are because of the deadline date the Department uses, and because of the Department's current tax amnesty program, the computer processing has also been delayed.

In response to questions from the Council, Ms. Dollens said she would have collection numbers by next week and that she will share the data with the Council. Also she noted the following: collections would be automatically transferred to the ELTF once the initial transfer is setup; the initial transfer should be made next week making the money available to pay claims; and the collection numbers are on target for the number of gallons of fuel sold in Indiana historically.

David Reynolds, State Budget Agency, addressed the Council on the transferring of money from dedicated funds to the General fund. He stated the Budget Director, according to IC 4-12-1-13.5, has the authority each year to make the decision to charge all dedicated funds an amount, generated by a formula set by the federal government, for an agency's use of general services of other agencies such as the Department of Administration, State Budget Agency, and State Auditor. Mr. Reynolds noted that last year the General fund received \$26M from all dedicated funds across the board, of which \$4.4M came from environmental funds. However, none of the transfer came from the ELTF.

Discussion of Final Report and Recommendations - While reviewing the final report draft and recommendations, the Council discussed the contents and made suggestions for revisions and further recommendations.

Barbra Sha Cox, an Indiana farmer, spoke on the affect of CFOs on her property and how surrounding property owners need the protection of additional setbacks for CFOs. She suggested the CFOs need to be subject to licensing and bonding as an additional protection for surrounding property owners.

Maggie McShane, Indiana Petroleum Council, asked the Council to reconsider its recommendation for requiring 10 percent ethanol blending by the end of 2006.

Miriam Dant, Baker & Daniels, suggested that vehicle manufacturers should be held responsible for paying for the removal of mercury switches. In regards to a mercury-free scrap certification program, such a program may be more obtainable if an incentive program was also used.

Dr. Indra Frank also spoke on mercury switch removal issues, including the fact that vehicle manufactures had other non-toxic alternatives, but still chose to use switches containing mercury. She noted that some states use disincentives if parts are used that contain hazardous substances.

Adoption of Final Report and Recommendations - The Council approved the final report by a roll call vote of 13-0 by the voting members appointed to the Council.

Dr. Lynn Corson, Indiana Clean Manufacturing Technology and Safe Materials Institute - Dr.

Corson presented an overview of the Institute to the Council and explained how the Institute was created by the General Assembly in 1993 with a mission to serve the state's manufacturing facilities in assisting with implementing clean manufacturing technologies. He also discussed that the Institute has duties assigned to it by law, however, the General Assembly did not appropriate any money to the Institute for the 2006-2007 biennium.

Chairperson Gard suggested that Dr. Corson meet with the appropriate budget people before the budget committee meetings begin next year. She also suggested they could work together on a strategy for getting their word out to the General Assembly.

Representative Dvorak asked Dr. Corson how the Institute reaches its small employers, and asked if he had any recommendations for other agencies. Dr. Corson then discussed how the Institute relies on using steering committees with representative of manufacturers and uses cold calls and visits.

V. COUNCIL FINDINGS AND RECOMMENDATIONS

The Council made the following findings of fact:

1. There is a New Direction for IDEM

Commissioner Thomas Easterly reported that the Indiana Department of Environmental Management under the Daniels Administration had a new structure and a new direction to achieve the ongoing environmental policies established by the General Assembly.

In order to delegate power with a flatter organizational structure, IDEM has eliminated the Deputy Commissioner level of administrators. It is committed to changing the culture to make decisions more quickly, more predictably and more consistently. Its motto is to be more clear, consistent and speedy. To that end it plans to implement most of the suggestions of the recommendations of the Government Efficiency Task Force IDEM Efficiency Task Team established by the 2003 General Assembly. Commissioner Easterly was a member of that task team.

The Efficiency Task Team recognized the strong asset of IDEM in its professional staff and recommended that staff have improved training and make greater use of standard operating procedures, quality management programs and written regulatory implementation policies.

To reduce uncertainty, IDEM has implemented a priority to resolve existing and new enforcement cases as quickly as possible consistent with fairness and promotion of environmental compliance.

For the sake of the environmental protection and for certainty for corporations, he reported on an IDEM initiative to resolve enforcement disputes in a timely fashion, to the extent it is in IDEM's power to do so. He said that at his start in January there were 121 cases that were older than two years. By June 10, forty of those were resolved; by October 10, an additional 19 were resolved. To help with this process, he has made greater use of the Commissioner Order to resolve a stalemate in enforcement negotiations. This forces the party to agree or take to Court where disagreement can be adjudicated. By June 10, he had used this order on eight old cases and on two newer cases.

One guiding principle of IDEM is the understanding that the state government should not unnecessarily impede improved economic vitality. Governor Daniels is committed to increasing the number of higher wage jobs in the state. IDEM will enforce the environmental regulations fairly and firmly in order that the health of its citizens is protected while at the same time IDEM will have procedures to do that in a manner that is not an impediment to competitive job growth.

Commissioner Easterly reported that the current major strategic initiatives of IDEM are 1) addressing Combined Sewer Overflows in the communities that have them and 2) addressing Indiana air quality issues as related to federal nonattainment designation.

2. Mercury Switches in Old Automobiles is an Environmental Challenge in Indiana that Needs Resolution

Mercury switches in older model year automobiles contain liquid mercury that can be released into the air when the automobile ultimately is crushed, shredded and refined into new steel or cast in a new form. Mercury in the air ultimately contributes to the global load of atmospheric mercury that in turn eventually can accumulate in fish in the wild that are eaten by humans. Pregnant women in particular are advised to avoid eating fish containing mercury. Federal law requires prevention of release of mercury from steelmaking facilities to the air, with compliance details being developed.

The mercury air emissions from steel mills can be prevented by removing the switches from the automobiles in the scrap yards or, much more expensively, by capturing the mercury emissions from the hot gases at the steel mill. Testimony about the difficulty of removal of the switch in the scrap yard ranged from the auto manufacturers' estimate of twenty to thirty cents per switch to the scrap yard owners' estimate as being much, much greater. The scrap industry disputed the cost of mercury switch removal as stated by the auto manufacturers. The difference appears to depend on whether you know exactly for each model where they are, how to remove them in simplest fashion, and on the frequency of presentation of automobiles to the scrap yard as wrecks where the switch no longer is in the accessible, factory-installed position.

Testimony was provided that the automobile manufacturers are required by state law in some other states to pay the scrap dealers to remove the switches to allow mercury-free scrap steel. The American auto manufacturers argue that given their financial difficulties as an industry being what it is, it is impossible for them to fund this in all states. Negotiations between USEPA and the automakers on that option have collapsed. Scrap dealers stated that deducting the uncertain removal cost from a scrap automobile could divert scrap to out-of-state competitors (or to less scrupulous competitors). The steel industry representative stated that restricting their purchase to no-mercury scrap was possible but was more expensive and therefore created a competitive disadvantage to Indiana steel mills. Further, unless there is government intervention, market availability of mercury-free scrap would be unpredictable were all mills in Indiana to be required to do that, and monitoring compliance by measuring mercury in millions of chunks of scrap would be difficult if not impossible.

Shipping scrap containing mercury overseas would result in the release of mercury to the air and still affect the United States; it is a global issue.

3. Opportunities and Impediments for Redevelopment of Indiana Brownfields

Brownfields are those former industrial or commercial properties whose redevelopment is impeded because of the perception that may or may not be founded that chemical contamination is present at the site in a manner to cause uncertain costs and liability. This challenge is faced by

1. current property owners who were responsible for the contamination and those that were not;
2. prospective purchasers of brownfield property without identified contamination and prospective purchasers of property that is known to be contaminated;
3. property that is under a specific regulatory program (like hazardous waste management or underground storage tanks) and property that is only regulated by general hazardous substance liability law (Superfund) or by petroleum spill liability law;
4. property that is of great potential economic or social value; and
5. property that municipalities are left with whose ultimate financial worth is far less than high clean-up costs.

Each situation is a different liability situation and requires a different state policy to assist the land to be recycled in a responsible, practical and environmentally-sound manner.

Note in Indiana the brownfield program (promoting redevelopment of sites perceived to be contaminated) is completely different than the other IDEM remediation programs such as Voluntary Remediation Program or enforcement programs.

The state is reorganizing its executive agency approach to addressing those specific brownfields where the state is investing funds. The **Indiana Economic Development Corporation**, the Indiana Finance Authority (created from several finance agencies by 2005 General Assembly) and IDEM are developing a new relationship to be able to present a single face to applicants requesting brownfield assistance. IDEM continues to make technical judgment decisions IFA continues to make financial decisions, and **the Indiana Economic Development Corporation** continues to support economic and community development.

The challenge is whether this multi-agency approach is always coordinated well enough for timely decisions critical to taking advantage of energies of municipalities and private investors.

The state is proud of its past efforts to provide \$3 million in brownfield loans that will result in \$41 million in economic development. This is worthwhile but the Indiana state investment is low relative to the investment of other Midwest states.

In previous years the Indiana brownfield tax credit was only \$0.10 on the dollar and thus not effective. The current version is a dollar for dollar match up to \$100,000 and \$0.50 on each dollar up to \$200,000 with an aggregate cap to all of \$2 million per year paid by the brownfield fund. It is anticipated that this will be used.

A critical challenge to brownfield property owners in Indiana is the uncertainty under state and federal law about the magnitude of the liability they have for chemical contamination on their property. Federal 1980 Superfund law changed the common law liability for damages from chemicals from the person who caused the damage and to that person's share of that damage to creating joint and several liability for responsibility for releases of hazardous substances whereby any person associated with the chemical or the property is responsible for all the damage. This expanded size of liability, together with continuing uncertainty and unpredictability in federal and state law about the nature of damage associated with chemical

contamination, has made financial institutions reluctant to lend money where such property is involved.

Other laws add different liability for actions with respect to contaminated land. These are laws such as govern hazardous waste management, petroleum spills, underground storage of gasoline, and other specific substances.

Partial solutions have been implemented from the federal and state government policies to make these liabilities predictable and manageable in order to reduce the amount of abandoned property. Most of the adjustments benefit prospective purchasers who had no responsibility for the Superfund hazardous substance contamination.

The Indiana approach to address aspects of contaminated property not under direct regulatory control was based on an early Michigan approach. This is the Voluntary Remediation Program. Under this program, if a site of contamination on a property is not under a regulatory program requiring remediation attention, then the property owner may pay the state to have it review the information about the contamination and, if the contamination is remediated adequately for the land use proposed, the state may issue a Certificate of Completion stating that the remediation of the site is adequate. The state may then issue a Covenant Not-to-Sue affirming that neither the state nor a third party may sue in the future for further remediation of the contamination that is known to be present at the site.

The clean-up standards the state uses are intentionally quite conservative to assure the land is good for a wide range of either industrial or residential uses. The federal government has issued a letter saying they will honor this; however, that letter does not obligate future federal administrations in the same way the state Covenant does obligate future state administrations. Nonetheless, this program in theory is widely regarded as providing as good practical protection from federal Superfund liability as probably is needed.

In 2002, the federal government itself changed the liability for innocent purchasers of property for contamination of hazardous substances that they did not know about provided they tried to discover it. Indiana has a state law consistent with that. Federal regulation is now relatively clear about the conditions to be met that the purchaser tried to find and had no idea of the presence of a contamination. That person is exempt from both state and federal law for subsequent discovery of chemical contamination provided that the purchaser does not make the situation riskier (or, of course, provided the purchaser did not cause the contamination). This makes it easier for a purchaser to buy property that is not contaminated, as far as the purchaser knows.

The federal government has also changed the law limiting liability for bona fide prospective purchasers who know about existing contamination of hazardous substances but are not required necessarily to clean it up to the same standards as the parties responsible for the release. They are only responsible to assure reasonable steps to prevent exposure are taken. Details about those reasonable steps are to be worked out by each state. The Indiana General Assembly has adopted a state law consistent with these provisions but much work needs to be done to develop a predictable, consistent appropriate policy to apply this to Indiana sites.

Remaining to be resolved by IDEM are the details of exactly what is required of knowledge and of remediation that is good enough to be the reasonable steps to reduce exposure and what verification documents would be provided to municipalities and the

purchaser. This is especially important to municipalities as they often are left to address properties whose intrinsic value is much less than the costs of a high quality VRP-type clean-up. For appropriate redevelopment of many brownfields in Indiana, it is necessary to improve the Indiana legal and administrative procedures to take advantage of federal and state law to allow the bona fide prospective purchaser to perform a remediation appropriate for the land use that may be less stringent than VRP required of parties who caused the contamination.

However, there are other limitations to the Voluntary Remediation Program. First, the Covenant Not-to-Sue applies only to the contamination at the site that the Commissioner knows about, not to what remains at the site unknown to the Commissioner. The program is only about IDEM determination of the risk of what it knows about, not about what could be present undetected. It is not a program that tells one how much to look for but a program that explains the meaning of what one finds.

A property owner may still be reluctant to sell a property due to unknown liability even with the Covenant. Second, the characterization of nature and degree of known contamination has yet to be standardized for VRP sites and has certainly not been put in regulation. As a consequence, IDEM technical staff is influenced by the policies of parallel remediation programs designed to achieve different regulatory purposes and by new thoughts of different staff members about what is appropriate. Interpretations of policies appear continually to change with the result that the timing and nature of IDEM VRP decisions are unpredictable. Third, the concept of the Covenant Not-to-Sue for known soil contamination is clear; the applicability to contaminated ground water is less clear.

Resolving the role of IDEM to assist purchasers with technical and legal judgment for their liability protection under innocent purchaser and bona fide prospective purchaser provisions needs to be worked through carefully, thoughtfully, and openly by IDEM.

4. Environmentally-sound Confined Feeding Operations in Indiana

Greatly expanding livestock production in confined feedlots is an integral component of the Daniels Administration's economic development strategy. Of equal concern is to do this in a manner that is both considerate of the quality of rural life and of the Indiana waters and air.

In the past, environmental regulations have been developed with a focus on industry or urban challenges. It is difficult to reconfigure them to be both practical and effective in agricultural settings.

One solution is to promote development of new technologies that are both practical and effective and to affect the transfer of good academic ideas to workable, trusted techniques on the farm.

The successful Indiana farmers are under pressure to shift from being independent producers to becoming growers as a part of a market-efficient, vertically-integrated, global agribusiness. The representatives of the agribusiness are the prime source of information about efficient production. The Purdue Extension Service can play a critical role helping the farmers to evaluate that information in the context of environmentally-sound practices.

While most Indiana farmers are good stewards of the land, good neighbors and professionals who manage their operations in an environmentally sound manner, a few do not.

They create unacceptable living conditions for their neighbors and a very few may intentionally operate outside the legal requirements to cause streams to be polluted.

The recent federal court ruling made it unnecessary for a confined animal feeding operation to obtain a federal NPDES wastewater discharge from lagoons that have no discharge. **The United State Environmental Protection Agency's Region 5 does not currently agree with the federal court ruling.** As a result, some in agriculture community are proposing that the regulation of state-permitted confined feeding operations be shifted from IDEM to a state entity familiar with and experienced with agriculture operations, leaving IDEM to regulate those feeding operations that did have a discharge and to monitor quality of the stream. Others in the agriculture community favor keeping all feeding operation permits under IDEM and to create a solid understanding of agriculture and biosecurity among the technically-skilled IDEM staff.

The federal government is working under a consent decree with livestock producers to use academic institutions to develop a sound technical basis for improved air quality measures at feedlots.

The Council discussed the provisions of Senate Bill 267-2005 in regards to agriculture nuisance actions.

5. Towards a Comprehensive Indiana Energy Policy

Indiana energy availability currently depends on factors that are beyond the control of Indiana citizens. Our transportation fuel depends on availability of gasoline, diesel, and jet fuels. Global petroleum and refining capacity depends on international balance of power (and integrity of national infrastructure), until reserves eventually yield products of greater and greater expense. Our electricity depends on a national market and on coal which is readily available to power plants that serve Indiana.

Electricity will be increasingly expensive to use due to environmental controls for ozone, particulates, mercury and, most likely, carbon dioxide. Natural gas is a valuable fuel for heating buildings, cooking, chemical feedstock, and manufacturing in Indiana as well as a back-up fuel for electricity and automobiles. However its price is projected to rise steadily and dramatically in the United States and the world in the years ahead.

Indiana needs to establish an energy strategy taking into account these trends in order to promote public policies that will give our next generation and future generations in Indiana the greater chance of living a quality life and being competitive in the global marketplace. This strategy needs to be coordinated by the state and include active, open dialog among our energy producers and suppliers and our energy consumers. The market forces alone with each sector seeking its own advantage from the Congress and the Indiana General Assembly may not result in the wisest overall, long-term energy strategy for Indiana residents and businesses.

One aspect of an Indiana energy policy could be to enhance particular sectors of the Indiana energy source economy such as coal production and agriculture. Another aspect could be promotion of efficient use of all forms of energy by Indiana consumers. A third aspect could be to promote electricity generated from sources other than fossil fuel.

The viability of soybean crop production and corn crop production in Indiana can be enhanced if there are developed markets for ethanol from corn and biodiesel from soybeans.

The opportunity for enhanced ethanol production would come if ethanol from corn were required to be at a concentration of 10% in all Indiana gasoline sold (E-10 gasoline). All current cars on the road can use E-10 without modification. This has a secondary benefit of reducing the net release of carbon dioxide from transportation. Mandating ethanol is complicated by state and national air pollution control strategies that may be most effective with a different constraint on composition of gasoline. Ultimately commercial production of ethanol from cellulose from corn stalks would bring even greater value to corn farmers. Biodiesel does have an advantage over petroleum diesel in the reduced amount of particulate matter in its exhaust. As the federal government tightens the fine particulate standards, requiring its use in Indiana vehicles or at Indiana pumps could be a wise policy.

Development of successful biofuel production facilities in Indiana would mean more jobs in Indiana while reducing dependence on foreign oil.

Energy recovery from Indiana waste tires such as use as fuel in cement manufacture was presented as an idea to reduce the waste disposal problem of five million unwanted tires needing to be disposed of in Indiana each year.

6. Dedicated Environmental Funds

In response to a request of the 2005 General Assembly IDEM presented a thorough review of the history and status of funds that the General Assembly has established that are dedicated to be spent on specific environmental improvement activities or specific IDEM operation needs.

In 2006-2007, \$154,358,128 was appropriated from dedicated funds. This was 51% of the total biennium for IDEM-related activities.

Two funds are now inactive. Municipal Waste Transportation Fund (IC 13-20-4) and Waste Facility Operator Trust Fund (IC 13-15-10). Four funds have now been assigned to Indiana Finance Authority for management: Wastewater Revolving Loan Fund (IC 13-18-13), Drinking Water Revolving Loan Fund (IC 13-18-21-2), Environmental Remediation Revolving Loan Fund (IC 13-19-5) and Supplemental Drinking Water and Wastewater Assistance Fund (IC 13-18-21-22).

Active Funds Administered by IDEM:

Underground Petroleum Storage Tank Excess Liability Trust Fund (IC 13-23-7-1)

Established by the state as a means for owners/operators of underground storage tanks containing certain petroleum products and other chemicals to prove financial responsibility for potential contamination in absence of private sector insurance.

Funds from tank fees and inspection fees on gasoline and diesel fuel

FY 2005 revenue \$29,715,648

Pay IDEM staff and reimburse remediation costs.

Solid Waste Management Fund (IC 13-20-22-2)

Established to promote recycling of solid waste and reduction of household hazardous waste into landfills and incinerators

Funds from \$0.50 per ton disposal fee for solid waste
FY 2005 revenue \$2,623,235
Pay for IDEM staff and grants/loans

Waste Tire Management Fund (IC 13-20-13-8)
Established to eliminate problems of past waste tire improper disposal and
reduce future tire disposal problems
Funds from \$0.25 per new tire sold
FY 2005 revenue \$1,916,647
Pay for IDEM programs to remove tires, inspections and education
(35%) and for Indiana Economic Development Council grants and loans
in waste tire management and market development for waste tire
products (65%)

Voluntary Remediation Fund (IC 13-25-5-21)
Established for property owners to pay IDEM to receive advice about
acceptable risk from known contamination at a site.
Funds from participants in program
FY 2005 revenue \$449,570
Pay for IDEM staff and IDEM contractors to review information about
sites provided by participants in program

Title V Operating Permit Program Trust Fund(13-17-8-1)
Established as means for Title V air permit holders to fund 100% of the
state costs to implement this federally-mandated permit program
Funds from air permit holders
FY 2005 revenue \$10,482,481
Pay for IDEM costs to operate this federal air permit program

Environmental Management Permit Operation Fund (IC 13-15-11-1)
Established as a means to have regulated community contribute to costs of
surface water, drinking water and solid and hazardous waste programs
Funds from the regulated
FY 2005 revenue \$26,933,576
Pay for part of costs of operating NPDES program, drinking water
program, solid waste management program and hazardous waste
management program

Environmental Management Special Fund (IC 13-14-12-1)
Established over the years with variety of revenue streams for special
environmental improvement projects; now includes Voluntary
Compliance Fund (IC 13-28-2-1)
Funds from fees and fines
FY 2005 revenue \$2,966,950
Pay for voluntary compliance program expenses and special projects as
Commissioner decides

Hazardous Substances Response Fund (IC 13-25-4-1)
Established for land remediation activities
Funds from tax on hazardous waste disposed in landfills; interest on
Balance

FY 2005 revenue \$4,635,029

Pay for state-ordered remediation prior to seeking reimbursement or for orphan sites

Asbestos Trust Fund (IC 13-17-6-3)

Established for administration of accreditation of asbestos inspectors and managers to comply with the federal Asbestos Hazard Emergency Response Act for appropriate inspection and remediation in situations like schools and demolitions

Funds from fees for steps in accreditation process

FY 2005 revenue \$507,132

Pay for IDEM staff to oversee accreditation

Underground Petroleum Storage Tank Trust Fund (IC 13-23-6-1)

Established to provide funds for corrective action on underground storage tanks to match federal grant

Funds from fees and fines

FY 2005 revenue \$2,295,097

Pay for corrective action remediation

Lead Trust Fund (IC 13-17-14-6)

Established to oversee activities for reduction of lead paint in federally-targeted housing with children

Funds from license fees for accredited lead professionals

FY 2005 revenue \$224,327

Pay for IDEM staff to oversee lead management accreditation

7. Indiana Ground Water Task Force

The Indiana Ground Water Task Force was established by the 1989 General Assembly as an organization with five state agencies and representatives of key stakeholder sectors to oversee the implementation of the state's Ground Water Protection and Management Strategy. The strategy was prepared after an intensive study involving hundreds of stakeholders and agency staff in the late nineteen eighties. It identified regulatory gaps, research needs, data management improvement possibilities and ways to improve coordination among state agencies on ground water. The task force has met four to six times a year reviewing the actions of state agencies on ground water protection and assessing state capacity to address remaining challenges.

Many of the specific priority issues raised in the 1989 strategy have been addressed by the agencies. Therefore, the Task Force has been reassessing the most effective means today for it to be organized and directed. Three options are being considered. One is to suggest that the General Assembly abolish the Task Force because the state agencies communicate well regularly about ground water matters through other mechanisms and offer citizen input in other ways. The second is to suggest that the General Assembly revise the directive to the Task Force to have an annual multi-agency public conference about the status of ground water challenges and agency capabilities to protect ground water. Specific challenges could be met by work groups between the annual Task Force conferences. The third is to suggest that the Governor or General Assembly recharge the Task Force with a task that would demand attention of the leaders of the relevant state agencies to assure appropriate coordination be given appropriate priority down the chain of command for ground water protection issues.

IDEM Office of Water Quality Drinking Water Branch is currently serving as staff for the Task Force and is coordinating receipt of comments from the public and agencies about which to recommend and why.

The Council made the following recommendations:

A. Confined Animal Feeding Operation

1. EQSC requests the Director of the Department of Agriculture to prepare a report by **July 2006** to the Governor, **EQSC**, and the General Assembly to recommend cost-effective, effective and efficient ways to improve the transfer of practical technology from Purdue University and other academic institutions to Indiana agriculture producers in matters that could improve the quality of life of Indiana residents and improve the environmental quality of Indiana air and water.

2. IDEM should aggressively enforce permits for confined feeding operations.

3. IDEM should look more closely at and approve new management technologies for improving confined feeding operations.

4. EQSC acknowledges the valuable role the federal and state agricultural extension services have played in improving the quality of Indiana agriculture production in an environmentally sound manner. It strongly endorses their continued work. **EQSC encourages continuing and increasing the role of extension services and soil and water conservation districts in promoting education and providing technical assistance with implementing management techniques.**

5. EQSC endorses the work of the federal government, livestock producers and academic institutions to assess scientifically the nature of the air emissions from livestock operations and technical options for addressing them.

6. EQSC recommends that the General Assembly seek a funding source to fund the development and building of a pilot program for a comprehensive nutrient management system and methane generation.

7. EQSC recommends the General Assembly to study the issue of financial assurance or bonding for confined feeding operations.

B. Mercury Switches in Scrap for Steel

1. EQSC requests the Lieutenant Governor to convene a commission to investigate viable options for solving the problem of mercury content in Indiana scrap steel. On the task force would be representatives of auto manufacturers, scrap dealers, and steelmakers with IDEM as advisor. It would answer the question: What is the means of reducing mercury emissions from Indiana steel mills from the contribution of mercury switches in automobiles in the manner that is the most cost-effective and equitable to all and is enforceable in a manner that is cost-effective, consistent and predictable?

2. EQSC supports rulemaking requiring mandatory removal of mercury switches by recyclers of scrap vehicles and junkyards, paid for by incentives from the state, with an enforcement component.

C. An Effective Indiana Brownfield Program

1. Raise brownfield tax credit to a cap of \$4 million paid by brownfield fund.
2. The Governor should appoint a stakeholder task force, supported by IFA, IDEM, and the **Indiana Economic Development Corporation**, to develop a written description of a comprehensive Indiana brownfield policy including legal issues, technical issues, program issues, funding issues and municipal issues. Strengths and weaknesses should be described with recommendations for improvement.
3. Legislation should be considered to grant IDEM authority to issue a conditional Covenant Not-to-Sue in order to have an appropriate policy to implement the spirit and the law of the bona fide potential purchaser for matters that cannot be resolved completely in a timely manner at the time of property transfer or development contract such as conditions under agreed orders for future ground water contingencies.
4. IDEM should, with stakeholder input from municipalities and others, establish an outreach program on how to apply new state and federal land contamination liability laws, especially on properties whose potential value is less than the cost of clean-up. It is critical to effective and efficient land recycling in Indiana that all parties have the same understanding.
5. The Lt. Governor should review effectiveness of relationship and communication between Indiana Finance Authority, **Indiana Economic Development Corporation** and IDEM regarding priorities and policies. Explore idea of concept of a State Brownfield Public Counselor Office reporting to Governor's Office to make integrated decisions on brownfield sites where inconsistent priorities, legal interpretations or technical understanding among the state agencies threatens to slow a project.
6. The Lt. Governor, in cooperation with IDEM and IFA, should report to EQSC the relative expenditure of state funds on brownfields redevelopment compared to other states in the Midwest and reasons for any difference. Similarly the report should compare Indiana to other Midwest states for number of applications and successful applications for brownfield assistance over the past five years and means of improving the rate of use of these funds.
7. To speed technical decisions about certain contaminated brownfields, IDEM should be encouraged to authorize overtime for staff for VRP. These funds are paid by the VRP applicant who would welcome faster service for a higher fee. To eliminate unacceptably slow response for normal brownfield decisions, it is necessary to increase resources to IDEM and IFA project staff to handle peak loads so that work on one important brownfield project does not slow other important projects.

D. Indiana Energy Policy

1. EQSC requests that the Governor convene an Indiana Sustainable Energy Commission to recommend state policies in
 - electricity production from all sources, transmission and consumption;
 - petroleum refining, transportation and consumption;

- coal products for transportation fuel production, transportation and consumption;
- agriculture products for transportation fuel production, transportation and consumption;
- hydrogen production, transmission and consumption, and other fuel sources viable in Indiana.

The policy should consider efficiency strategies and alternative options for transportation and land use planning. The policy should take into account social, economic, technical, environmental and legal factors and should look ahead five years, ten years, twenty years, fifty years and one hundred years. The policy should allow energy flexibility for future generations to enjoy a good quality of life in an economically competitive state.

2. EQSC requests that the **Director** of the Department of Agriculture to prepare a comprehensive plan for ten, twenty and fifty years with options for biofuel production with and without particular state interventions. **EQSC also requests that the Director of Agriculture report to the EQSC by the end of 2006 and include the net and gross Btu values for the fuels considered in the plan.** This unified vision should include estimates of land in various types of crop for food and fiber and well as fuel given estimate of future market forces on cost of production and value for food and fiber, understanding of possible and probable federal policies regarding crop production and biofuel, future of petroleum product process and availability and explanation of all other factors that make this a good investment for the state to promote.

3. In order to help our country move to energy independence, to help our Indiana farmer be successful in the marketplace and to reduce net greenhouse emissions, we recommend that by December 31, 2006, **consistent with federal law**, all gasoline sold in Indiana have ten percent ethanol derived from biomass. **EQSC recommends the General Assembly look at, within two years, the feasibility of mandating 2% soydiesel blending and the Department of Agriculture, under the Lieutenant Governor, provide a feasibility report to EQSC.**

4. **EQSC recommends that the General Assembly consider increasing existing tax incentives for biodiesel production and blending facilities.**

5. Request report from IDEM on feasibility of mandating biodiesel as a strategy for attaining present and future federal fine particulate standards for air quality in Indiana.

6. Explore funding mechanisms to provide incentive for end-users of waste tires such as cement kilns to incorporate waste tires beneficially in their operations. Ideas include an annual fee on all vehicle owners or an increased fee on all new **tire** purchases and it could be used in ways as to subsidize the collection of waste tires for resource recovery (e.g. bounty) or payment to end-user per tire used beneficially.

E. Environmental Dedicated Fund

1. In 2006, EQSC should evaluate the IDEM report on the dedicated funds to determine whether the purpose of each fund is still valid and whether the implementation of each fund is working effectively, efficiently with appropriate quality oversight and transparently to the public to achieve the purpose.

2. **IDEM should evaluate whether changes should be made in the structures of its dedicated funds.**

WITNESS LIST

Kasimer Andary, Alliance of Automobile Manufacturers
Melanie Batalis, Indiana Soybean Growers Association
Dr. Brian Bowen, Purdue University
Tom Boyle, Boyle & Associates
Dr. Lynn Corson, Indiana Clean Manufacturing Technology and Safe Materials Institute
Barbra Sha Cox, Farmer
Miriam Dant, Baker & Daniels
James Davis, Waste Management
Linda Dollens, Department of Revenue
Dr. Indra Frank
Senator Gary Dillon
Gary Drook, Central Indiana Ethanol
Tom Easterly, Commissioner, IDEM
Matt Greller, Indiana Association of Cities and Towns
Vince Griffin, Indiana State Chamber of Commerce
Dr. Al Heber, Purdue University
Eric Holdsworth, Edison Electric Institute
Scott Imus, Indiana Petroleum Marketers and Convenience Stores Association
Cal Jackson, **Poultry Producer**
Dr. Brad Joern, Purdue University
Dr. Don Jones, Purdue University
Calvin Kelly, Indiana Finance Authority (IFA)
Joe Kelsay, **Dairy Producer**
Dr. Michael Ladisch, Purdue University
Michelle Lechner, Automotive Recyclers of Indiana
Mark Legan, **Pork Producer**
Kathy Lucas, Bose, McKinney & Evans
Kathy Martin, Martin Environmental Services
Fred Meyer, Indiana Automotive Wholesalers Association
Joe Meyer, **Grain Farmer**
Janet McCabe, Improving Kid's Environment
Jim McGoff, IDEM & IFA
Maggie McShane, Indiana Petroleum Council
Andy Miller, Indiana State Department of Agriculture
Bruce Oertel, IDEM
Michelle Oertel, IDEM
Buce Palin, IDEM
Lance Price, Johns Hopkins Bloomberg School of Public Health
Belina Puetz, Indiana Soybean Growers Association
David Reynolds, State Budget Agency
David Robb, Trader's Point Creamery
Dr. Rae Schnapp, Hoosier Environmental Council
John Stowell, Cinergy Corp.

David Sulc, Nucor Steel

Dr. Al Sutton, Purdue University

Dr. Bernard Tao, Purdue University

Dr. Ron Turco, Purdue University

Bob West, ES&E

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