

---

**TITLE 329 SOLID WASTE MANAGEMENT BOARD**

**SECOND NOTICE OF COMMENT PERIOD**

LSA Document #05-250(SWMB)

**DEVELOPMENT OF NEW RULES AT [329 IAC 11.5](#) CONCERNING MERCURY SWITCHES**

**PURPOSE OF NOTICE**

The Indiana Department of Environmental Management (IDEM) has developed draft rule language for new rules at [329 IAC 11.5](#) concerning mercury switches. By this notice, IDEM is soliciting public comment on the draft rule language. IDEM seeks comment on the affected citations listed and any other provisions of Title 329 that may be affected by this rulemaking.

**HISTORY**

First Notice of Comment Period: October 1, 2005, Indiana Register (29 IR 221).

Continuation of First Notice of Comment Period: May 1, 2006, Indiana Register (29 IR 2696).

**CITATIONS AFFECTED:** [329 IAC 11.5](#).

**AUTHORITY:** [IC 4-22-2](#); [IC 13-14-7-1](#); [IC 13-14-8-1](#); [IC 13-14-8-2](#); [IC 13-14-9](#); [IC 13-15-2](#); [IC 13-19-3-1](#); [IC 13-30-2](#); P.L.170-2006.

**SUBJECT MATTER AND BASIC PURPOSE OF RULEMAKING**

Vehicles have historically used mercury containing switches to turn on lights when the hood or trunk is opened and to operate some anti-lock brake systems (ABS systems). A mercury switch is a small bullet-shaped capsule that contains mercury and two electrical contacts. Domestic vehicles manufactured before 2001 and imported vehicles manufactured before 1992 may contain mercury switches. These switches do not pose a threat to human health or the environment when used in a properly maintained vehicle. Once a vehicle is sent for salvage and is shredded and sent to a smelter for reuse, the mercury contained in the switches can leak out and be released into the air or water.

House Enrolled Act 1110-2006 (Public Law 170-2006) requires the removal of mercury switches from motor vehicles and has the following additional provisions:

- \*Requires manufacturers of motor vehicles offered for sale in Indiana to develop and implement a plan to remove, collect, recover, and recycle or dispose of certain mercury switches from end-of-life vehicles.

- \*Exempts from mercury switch plan development requirements motor vehicle manufacturers that have never installed mercury switches in their motor vehicles.

- \*Requires the Indiana Department of Environmental Management (IDEM) to allow a public comment period on a plan of at least 30 days and to act on the plan within 120 days.

- \*Requires motor vehicle recyclers to remove all mercury switches from end-of-life vehicles.

- \*Provides that the term "motor vehicle recyclers" includes automotive salvage recyclers, automobile scrap yards, hulk crushers, scrap metal processors, and vehicle disposal facilities.

- \*Provides that mercury switch removal requirements take effect 30 days after IDEM approves a plan and expire the earlier of July 1, 2016, or the date a national mercury switch recovery program takes effect.

- \*Provides for a payment out of the solid waste management fund (SWMF) to a motor vehicle recycler for each mercury switch removed:

- (1) in an amount of at least \$1 and not more than \$5 as determined by the IDEM commissioner; and

- (2) to the extent that the commissioner makes money available from the SWMF for that purpose.

- \*Allows money to be redirected to the SWMF for that purpose from the Indiana recycling promotion and assistance fund and the environmental management special fund (EMSF).

- \*Allows any person to contribute or assign assets to the solid waste management fund to be used by IDEM to make payments for mercury switches.

- \*Requires IDEM to report information on mercury switch removal to the legislative council and the environmental quality service council.

This rulemaking will implement P.L.170-2006 by proposing to add reporting requirements for motor vehicle recyclers and other person that removes mercury switches from end-of-life vehicles to report to IDEM; the allowance for motor vehicle recyclers to remove and recycle mercury switch assemblies and ABS mercury switches and receive payment; the amount of the payment for a mercury switch removed from a vehicle; the procedure for the commissioner to pay a claim for the removal of a mercury switch; clarification of a "motor vehicle that is intentionally and unintentionally flattened, crushed, or baled"; clarification of the effect on the rule if the statutory authority expires; and any necessary definitions and requirements in order to meet the statutory provisions of HEA 1110-2006 (Public Law 170-2006) and establish an effective program.

---

**IC 13-14-9-4 Identification of Restrictions and Requirements Not Imposed Under Federal Law**

(A) The requirement under Indiana law for motor vehicle recyclers to remove convenience switches that contains mercury is not a requirement currently posed under Federal law.

(1) The environmental hazard requiring the implementation of this rule is a mercury switch that is a small bullet-shaped capsule that contains mercury and two electrical contacts. Domestic vehicles manufactured before 2001 and imported vehicles manufactured before 1992 may contain mercury switches. These switches do not pose a threat to human health or the environment when used in a properly maintained vehicle. Once a vehicle is sent for salvage and is shredded and sent to a smelter for reuse, the mercury contained in the switches can leak out and be released into the air or water. Removal of the mercury switches from steel scrap will reduce mercury emissions from steel making facilities.

(2) The estimated fiscal impact is not significant because the motor vehicle recyclers will be paid by IDEM for removing the switches and the recycling costs will be paid by an association of automobile manufacturers. The benefit of the rule will be a reduction of mercury in the environment. Steel companies will not be required to retrofit, at a great expense, for the removal of mercury.

(3) The materials relied on by IDEM to develop the rule include an informational paper on vehicle mercury switches written by Lynn West, IDEM, August 2005, and provided to the Solid Waste Management Board.

(B) The requirement for automobile manufacturers to submit a plan to IDEM for approval that specifies collection, storage, transportation and recycling to support the mercury switch removal program.

(1) The environmental hazard requiring the implementation of this rule is a mercury switch that is a small bullet-shaped capsule that contains mercury and two electrical contacts. Domestic vehicles manufactured before 2001 and imported vehicles manufactured before 1992 may contain mercury switches. These switches do not pose a threat to human health or the environment when used in a properly maintained vehicle. Once a vehicle is sent for salvage and is shredded and sent to a smelter for reuse, the mercury contained in the switches can leak out and be released into the air or water.

(2) Regarding the estimated fiscal impact, as per an association of automobile manufacturers (ELVS), the plans have been written and submitted to other states so there is minimal cost involved. All other costs incurred by the automobile manufacturers are required under the Indiana statute.

(3) The materials relied on by IDEM to develop the rule include educational information provided by an association of automobile manufacturers called End of Life Vehicle Solutions (ELVS).

**Potential Fiscal Impact**

There should be no additional fiscal impact based on the rule, as all provisions are required under Indiana statutes, and the purpose of this rulemaking is implementation of the existing Indiana Law.

**Public Participation and Workgroup Information**

No workgroup is planned for the rulemaking. If you feel that a workgroup or other informal discussion on the rule is necessary, please contact Lynn West, Rule, Planning, and Outreach Section, Office of Land Quality at (317) 232-3593 or (800) 451-6027 (in Indiana).

**SUMMARY/RESPONSE TO COMMENTS FROM THE FIRST COMMENT PERIOD**

IDEM requested public comment from October 1, 2005, through November 1, 2005, on alternative ways to achieve the purpose of the rule and suggestions for the development of draft rule language. IDEM received comments from the following parties by the comment period deadline:

Delores A. Pieper (DAP)  
Carl W. Lowry (CWL)  
Blake Jeffery, Indiana Cast Metals Association (INCMA)  
Andrew Murdock, Rochester Metal Products (RMP)  
Allison Meadows (AM)  
Dave Cocagne, Mervis Industries (MI)  
Michelle Lechner, Automotive Recyclers of Indiana (ARI)  
Hoosier Environmental Council (HEC)  
Patrick Bennett, Indiana Manufacturers Association (IMA)  
Ecology Center/Environmental Defense (EC/ED)  
David Sulc, Nucor Steel (NS)  
Alliance of Automobile Manufacturers (AAM)  
Eric Harris, Institute of Scrap Recycling Industries, Inc. (ISRI)  
Patrick Gorman, Indiana Steel Environmental Group (ISEG)

Following is the summary of the comments received and IDEM's responses thereto:

**Regarding legislation:**

*Comment:* On behalf of Mervis Industries, I write to join in the comments of the Institute for Scrap Recycling Industries (ISRI) regarding the proposed mercury switch rule. Mervis Industries operates industrial recycling facilities in Indiana, and we believe that this issue would be most appropriately addressed legislatively. This approach would parallel that of several other states. (MI)

*Comment:* Instituting legislation that will decrease the amount of mercury originating from automobile switches, including hood light, trunk light, and ABS switches, is certainly a step in the right direction. However, I would like to make a couple of comments regarding the current proposal. In order to maximize the effect of this proposal, it should first apply to all vehicles sent for recycling and to any switches that are removed during regular maintenance of a vehicle. In order to achieve the best retrieval of the mercury switches, Indiana should follow the lead of several other states that have instituted reimbursement values for the proper disposal of switches. (AM)

*Comment:* In conclusion, you have been provided with information on how other states have dealt with this issue and laws now in effect. Legislative formats would enable a law that would hold the automakers responsible for their actions. (ARI)

*Comment:* Environmental Defense and the Ecology Center have been working on the issue of automobile mercury switches for more than ten years. In 2001 both organizations joined with national representatives of all of the industries involved in processing and recycling end-of-life vehicles to form the Partnership for Mercury-Free Vehicles ("the Partnership"). To effectively address this issue the Partnership developed model legislation, which has been enacted in various forms by Arkansas, Maine, New Jersey, North Carolina and Rhode Island. Many other states are also considering the Partnership approach. (EC/ED)

*Comment:* In legislation passed in other states on mercury switches, automobile manufacturers are required to provide information that would be helpful for switch retrieval in Indiana. The laws that have been passed require the manufacturers to compile information identifying the make, model, and year of vehicles that may contain mercury switches, description of the mercury, the location of mercury switches, and safe and environmentally sound methods for removal of the switches from end-of-life vehicles. The switch recovery program in Indiana would benefit from this information, and it may not be difficult to get given that it is already being compiled for other states. We encourage IDEM to attempt to get this compiled information on mercury switches either from the manufacturers or from one of the other states. (HEC)

*Comment:* Nucor Steel proposes an alternative way to achieve the purpose of the rule, which has been adopted in varying forms in other states. Attached is a copy of legislation adopted in the State of Arkansas and supported by the Partnership for Mercury Free Vehicles ("PMFV"), a recycling industry group which includes the Steel Recycling Institute, a unit of the American Iron and Steel Institute, the Automotive Recyclers Association, the Institute of Scrap Recycling Industries, the Steel Manufacturing Association, and several non-governmental organizations. The mission of the PMFV is to develop and promote a comprehensive solution to removing mercury from vehicles before they are recycled. Although this proposal is in the form of legislation as opposed to rulemaking, it incorporates the concepts that Nucor strongly supports. This proposal has also been adopted by legislation in Maine and New Jersey. Rhode Island recently passed a law requiring a mandatory collection program without bounties for one year. If targets are not achieved within that year, the automakers are required to pay bounties to dismantlers for switch removal. Similar legislation is being considered in at least 12 other states. Such a vehicle-manufacturer focused program in Indiana would reduce the quantity of mercury in the environment by removing mercury from vehicles in commerce and end-of-life vehicles; create a collection and recovery program for mercury switches removed from vehicles in Indiana; and establish a system to store the mercury collected and recovered from vehicle components in the event that environmentally appropriate management technologies are not available. (NS)

*Comment:* Since 2001, ISRI has been working to ensure that the maximum number of mercury switches is removed from end-of-life vehicles to ensure that minimum amount of harm to American citizens and our environment. To accomplish this goal, ISRI, the steel and automotive recycling industries and the environmental community established the Partnership for Mercury Free Vehicles (PMFV) to encourage States and the Federal Government to enact legislation or to otherwise create effective mercury switch removal programs. To date, the PMFV has assisted in the enactment of mercury switch legislation in New Jersey, Maine, Arkansas, North Carolina, and Rhode Island. In addition, the PMFV is working on bills in a number of other states. Moreover, it should be noted that the New Jersey Department of Environmental Protection (NJDEP) considered promulgating rules requiring mercury switch removal from motor vehicles. Instead, it stayed promulgating regulations until stakeholders representing the New Jersey PMFV had an opportunity to seek a legislative solution. A NJDEP study of vehicle mercury switches concluded that since many entities that handled end-of-life vehicles at the end of their useful lives were small mom-and-pop salvage and junk yards and were marginal businesses, at best, an incentive payment to dismantlers, salvage, and junk yards that handles such vehicles was the only way to insure maximum switch removal resulting in minimum adverse health effects. The NJ PMFV successfully campaigned for the enactment of mercury switch legislation requiring auto manufacturers- the parties responsible for installation of mercury switches in vehicles-to pay a \$2 incentive to anyone who removes a switch and an addition [sic] \$.25 per switch to the state for oversight of the switch program. The bill was enacted with two negative votes. Consequently, NJDEP did not promulgate its mercury switch rule. (ISRI)

*Comment:* It is for these reasons that ISRI recommends a different course of action. ISRI is not asking Indiana to regulate within a vacuum, but rather to consider the careful and well thought out legislative choices that other states have chosen to address this issue. Law makers and regulators throughout the country are recognizing that the best route to address this issue is through legislation that hold automakers financially

responsible for deciding to save a few cents a switch over protecting the health and welfare of your children and unborn fetuses—those most vulnerable to the pernicious effects of mercury. Should such legislative effort fail, IDEM can always pursue a regulatory approach. However, as the Environmental Protection Agency is currently drafting an Electric Arc Furnace Area Section rule, which will address the mercury switch issue by requiring EAF's to source control mercury vehicle switches, an IDEM rule may be unnecessary as a national rule will be in place. Should legislation fail or the national rule be considered too lenient, IDEM can always promulgate a more stringent rule. (ISRI)

*Response:* Indiana now has a law for the removal of convenience switches. House Enrolled Act 1110-2006 (Public Law 170-2006) requires the removal of mercury switches from motor vehicles by the motor vehicle recycler and requires manufacturers of motor vehicles offered for sale in Indiana to develop and implement a plan to remove, collect, recover, and recycle or dispose of certain mercury switches from end-of-life vehicles.

If a national law is passed, the Indiana law and rule will expire or be repealed. The Indiana rule is being promulgated to help clarify the implementation of the Indiana law governing this issue.

**Regarding vehicle manufacturer's responsibility:**

*Comment:* As outlined in the ISRI position paper, automobile manufacturers continued to use mercury switches despite mercury's known human health impact. These same manufacturers should be held financially responsible for the costs associated with a mercury switch removal program. In our opinion, such a program would best be effectuated through legislation. (MI)

*Comment:* In addition, car manufacturers should be held accountable for this reimbursement fee, at least for vehicles manufactured in the last 15 years. It has been known since at least 1990 that there were alternatives to mercury containing switches, yet American auto makers continued to use there toxic components for their own economic benefit. (AM)

*Comment:* ARI strongly believes the polluter must pay. After reading the history I am sure you would agree. How can the auto recycler be asked to remove these switches out of the goodness of their hearts when the automaker who put them there, after being warned to stop using them, is not held responsible at all. They have to be held accountable for their actions. (ARI)

*Comment:* The parties removing mercury from automobiles should not bear the financial burdens of this collection system, they did not choose to use the mercury in the first place. The automakers must bear primary responsibility for the cost of the programs so that they are held responsible for the design choices they made over the years, and because they continued to use mercury switches for many years beyond phase-out dates that they previously committed to meet. (EC/ED)

*Comment:* Moreover, dismantlers were not responsible for installing mercury switches, nor for the auto manufacturers' continued use of this component in vehicles manufactured and sold in the United States, even after they discontinued the use of mercury switches in vehicles manufactured and sold abroad. Unlike other auto components that dismantlers already remove, such as batteries, tires and wheels, and drain oil and gas, mercury switches have no value and will be costly for dismantlers to remove and dispose of. For these reasons, the primary responsibility for implementing and funding a mercury recovery plan should lie with the vehicle manufacturers. (NS)

*Comment:* The PMFV is a unique coalition composed of U.S. environmental organizations and the entire chain of recyclers of End-of-Life Vehicles (ELV); Environmental Defense, The Ecology Center, Institute of Scrap Recycling Industries (ISRI), Steel Manufacturers Association (SMA), and Automotive Recyclers Association (ARA). All Partnership members are committed to pursuing a national approach or a state-by-state approach to resolve the vehicle mercury switch problem. The PMFV supports programs that require auto manufacturers to pay an incentive to dismantlers and other who remove mercury switches from vehicles, and to be financially responsible for proper switch management, from removal to grave. The PMFV advocates that auto manufacturers must be held financially responsible for the mercury switch removal program so as not to reward their bad design decision and bad behavior in failing to remove the switches which they know to be a human health hazard until the Maine legislation of 2002 required them to do so. (See Below: Why U.S. Auto Manufacturers Must Pay) A final goal of the PMFV is to make certain that life cycle environmental costs are openly considered when next the U.S. auto industry designs its products. The primary responsibility for implementing and funding a mercury recovery plan should lie with U.S. auto manufacturers. The financial burden should not be the responsibility of dismantlers, shredding operations, the steel industry, consumers, or vehicle registrants. U.S. automakers opted to use mercury switches in place of mechanical or ball bearing switches to save a few cents a switch. In 1993, auto manufacturers made a promise to a Minnesota legislator to quickly phase out the use of mercury switches. Despite the promise, they continued to install these switches in vehicles sold in the United States. Not until 2002, when Maine enacted mercury switch removal legislation, were U.S. automakers forced to end mercury switch use. It must be noted that in 1993 automakers ended the use of mercury switches installed in vehicles built or sold-into the European market. Like other automakers, the U.S. auto industry ceased using mercury switches for its vehicles sold in Europe. But, unlike other auto makers which ended the practice of mercury switch use in 1993, the U.S. auto manufacturers continued to install mercury switches in its vehicles built for sale in the American market! While acquiescing to protect the health of European children and others, American car-makers at the

same time, knowing fully the adverse impacts of mercury on human health and the environment, continued placing American children and adults at risk for mercury poisoning by continuing to install the offending switches in vehicles for sale in the United States. U.S. automakers argue it is not their responsibility to manage the hazardous mercury that they designed into their switches. They contend that dismantlers should bear the cost of removing toxic mercury from vehicles. This, despite the fact the dismantlers had no responsibility for installing the switches, and despite the fact that the U.S. auto makers continued using the switches long after they knew of the harm they might cause to the health of American citizens-especially children-and the environment. Currently, IDEM has proposed that costs associated with mercury switch recovery should be passed onto the vehicle owner by the salvage yard. Interesting enough, in Illinois, U.S. auto manufacturers have requested that a fee be charged to purchasers of new vehicles to finance a switch collection program. The problem with this approach, as well as charging the vehicle owner at the time of vehicle disposal, is that such fees require government to establish an unnecessary bureaucracy to collect the fees and administer the incentive or pay-out program. Furthermore, fees collected by government are often diverted to other state priorities and are not used for the purpose for which originally intended. Raymond Communications, in a study, found that such programs involving manufacturers, rather than government, are more efficient and result in higher recovery rates. Furthermore, asking the consumer to pay for the bad behavior and poor decision of the U.S. auto makers turns the notion of "polluter pay" on its head. And, if the manufacturers realize that they can always get someone else to pay for their mistakes—deliberate or not—they have no incentive to design their products with life cycle costs (which include environmental and health costs at the end of their products' useful life). Auto makers created this problem, and should be held financially responsible for solving it. Indiana's and America's children deserve no less. (ISRI)

*Comment:* Mercury is a lethal toxin to humans. In drafting your rules please consider: 3. the cost of this mercury capture program should be borne by the automobile manufacturers. (CWL)

*Response:* The Solid Waste Management Board has no authority to require automotive manufacturers to pay for the cost of removing the mercury switches. The Indiana law provides for a payment out of the solid waste management fund (SWMF) to a motor vehicle recycler for each mercury switch removed in an amount of at least \$1 and not more than \$5 as determined by the IDEM commissioner; and to the extent that the commissioner makes money available from the SWMF for that purpose. It also requires the vehicle manufacturers to develop and implement a plan for collection and management of the convenience switches.

#### **Regarding removal of all switches:**

*Comment:* The rule should apply to mercury-containing hood-light switches, trunk-light switches, and ABS switches in all vehicles sent for recycling and to any mercury-containing switches replaced during maintenance of a vehicle. (DAP)

*Comment:* In order to capture as much mercury as possible, switches from antilock brake systems (ABS), ride-control system and hood and trunk lights should be considered for inclusion. In 1996 white paper the Society of Automotive Engineers (SAE), it was estimated that switches at those locations accounted for 99.9% of mercury in vehicles. (Nachtman, J. and D. Hill. Mercury in Automotive Systems-A White Paper. International Congress and Exposition, #960409, SAE. Detroit, MI, Feb 1996.) Switches in lights accounted for 87%, antilock brakes 12% and active ride-control systems 1% of automotive mercury at that time. Since 1996, as the use of mercury light switches in new car models has decreased, use of mercury in antilock brakes has increased. (Griffith, C., et al. Toxics in Vehicles: Mercury, Implications for Recycling and Disposal. Jan. 2001.) Therefore, HEC urges IDEM to include ABS switches in the rule. Though the total amount of mercury in the active ride-control systems is uncertain, vehicles with these systems have two to four switches containing one gram of mercury each, so these switches should be considered for inclusion in the rule. (HEC)

*Comment:* Mercury is a lethal toxin to humans. In drafting your rules please consider: 1. the rule should apply to all vehicles sent for recycling and any switch replaced during maintenance. 2. the rule should apply to mercury containing hood light switches, trunk light switches, and ABS switches. (CWL)

*Response:* Even though the Indiana law did not require ABS switches to be removed, the rule will allow ABS switches to be removed, collected, and sent to the processor to obtain a voucher for payment. Any switches collected during a routine maintenance of the vehicle are subject to the universal waste regulations and must be handled accordingly.

#### **Regarding cost:**

*Comment:* The cost of this mercury-capture program should be borne by the automobile manufacturers (who stopped using mercury switches in cars sold in Europe in 1990 but didn't stop in the U.S. until 2001). Other states require the manufacturers to pay the recyclers a bounty per switch retrieved. Indiana's rules could include such a bounty since it is a good way to achieve retrieval of the switches. It's so very important that we allow no more mercury to be expelled into our Indiana soil and water. It's also important that no state funds be spent in recapturing mercury. This cost should be borne by those who put in the switches. (DAP)

*Comment:* The cost to remove each mercury switch should be passed to the automotive manufacturers. (RMP)

*Comment:* First, the mercury switch is not a marketable item. When trying to come up with a figure as to how much it would cost to remove a switch it is hard to say. When removing parts from a vehicle at the end of its life it

is fact that the parts removed are marketable, so therefore, they are making money for the business, and employee being paid to do so. Removing mercury switches at the end of life brings no dollar value to the business and takes away from monies to be made for the business on any given day. The time to remove a switch is unknown. Some may take a minute others can take so much longer depending on the condition of the car. It also depends on where and how many switches there are in a given end of life vehicle. (ARI)

*Response:* The Solid Waste Management Board has no authority to require automotive manufacturers to pay for the cost of removing the mercury switches. The Indiana law provides for a payment out of the solid waste management fund (SWMF) to a motor vehicle recycler for each mercury switch removed in an amount of at least \$1 and not more than \$5 as determined by the IDEM commissioner; and to the extent that the commissioner makes money available from the SWMF for that purpose. The fiscal impact of the rule relies on the average costs to any regulated entity.

#### **Regarding Alternative 1:**

*Comment:* We feel that "Alternative 1" would be the best option, due to the difficulty in removing mercury switches after the cars have been processed through the salvage yards. (RMP)

*Comment:* The first major concern of the ISEG regarding the proposed rulemaking relates to its utility. The ISEG strongly supports a program designed to encourage the removal of mercury switches from end-of-life vehicles by auto salvage yards, junk yards, auto dismantlers, or scrap metal dealers. As the Notice recognized, "it is environmentally safer for the mercury switches to be removed at the salvage or junk yard". The third major concern of ISEG regarding the proposed rule is that the proposed Alternative #2 regulatory program (specifying that mercury switches be removed by smelting operations) is unrealistic and totally incapable of being implemented by the Indiana steel industry. As noted above, much of the scrap steel purchased by the steel industry is crushed and baled prior to receipt. It would be impossible to locate, let alone remove, any mercury switches that may be present at this point in the supply chain. To be effective, mercury switches must be removed at the point of dismantling where they are still accessible. Because of this, the potential fiscal impact of Alternative #2 is greatly underestimated. If this proposed rule were to be promulgated with language disregarding the ISEG's second and third major concerns, the recycling of end-of-life vehicles in Indiana would be seriously compromised. (ISEG)

*Comment:* Of the alternative set forth in the first notice of rulemaking, HEC favors alternative #1, removal of switches at auto salvage yards and junk yards. We are confident that alternative #1 would produce a better rate of retrieval of the switches and better capture of the mercury. Alternative #2, in which switches would be retrieved at the shredder or smelter, runs the risk that many switches would be missed since many of the cars arrive at those locations already crushed making switch retrieval substantially more difficult. Also, the process of crushing would likely break some of the switches causing mercury to be released. (HEC)

*Comment:* The fiscal impacts is [sic] of these alternatives are probably too low. Alternatives #2's obligation on shredding and smelting operations is of concern because of the increased difficulty and cost of removing switches in vehicles that have already been crushed and baled. The more effective and less costly method is to remove switches earlier in the process. (NS)

*Comment:* Regulators believe that mercury switches are the predominant automotive source of mercury contamination. It is important to note that most foreign manufactured vehicles and U.S. vehicles manufactured overseas discontinued the use of mercury switches in the early 1990's. However, incredulously, despite known health risks, U.S. automakers disregarded the health concerns of Americans and continued to use mercury switches in vehicles sold in the U.S. As a result, vehicles manufactured in the U.S. prior to 2002 likely contain up to two mercury light switches (with 1 gram of mercury per switch). Some vehicles also contain mercury switches in the anti-lock braking system (with 2.4 grams of mercury per switch). To address this issue, the EPA is currently considering regulations to reduce mercury emissions from electric arc furnaces (EAFs). However, mercury scrubbers have not been proven effective and manufacturers of this technology cannot guarantee removal rates. As a result, the only cost effective alternative is to remove mercury switches from end-of-life vehicles before they are crushed or flattened in preparation for shredding.. A mandatory removal program must place the responsibility for paying for the removal of mercury switches on the party that installed them and then obstinately continued to use them despite promises made to phase them out--the U.S. auto manufacturers. The PMFV developed model legislation to accomplish this equitable alternative. A program that holds U.S. automakers responsible should require: removing mercury from vehicles in commerce and end-of-life vehicles; bearing the financial responsibility for removal and management of the mercury components; creating a collection and recovery program for mercury switches removed from vehicles; establishing a system to store the mercury collected and recovered from vehicle components in the event that environmentally appropriate management technologies are not available; and designing future vehicles for maximum environmental protection and recyclability at the end of their lives by implement a Design for Recycling Program which includes phasing out the use of mercury in future vehicle models. Automotive dismantlers must not bear the financial or regulatory burdens of mercury switch recovery. U.S. automakers must be responsible for their bad design choices and their deliberate decision to place American children at risk of mercury poisoning. (ISRI)

*Response:* Yes, the department recognizes that end-of-life vehicles at the auto salvage yards are the

optimum time to remove the mercury switches and concurs with the commentors.

**Regarding steel companies not being allowed to take vehicles with mercury switches:**

*Comment:* "The rule would also cause metal shredding operations, scrap metal recyclers, metal smelters, and steel manufacturers to only recycle scrap metal that did not contain mercury or mercury switches." This language does not take into account the fact that manufacturers would be restricted in the kind of scrap metal available for their use. The current scrap market is already tight due to the influence of foreign consumption, and to restrict the amount of available scrap would cause a severe burden on the business community. As an industry that is subject to federal MACT standards, we have an opportunity to reduce our production levels in order not to be subject to the MACT scrap regulations. This language seems to suggest that no matter what the level of production; a company would not be allowed to purchase scrap that may have mercury switches. (RMP)

*Comment:* The second major concern of the ISEG regarding the proposed rule is the implication that steel manufacturers would not be allowed to recycle scrap metal unless all mercury and mercury switches had been removed. Based on the large quantities of steel scrap purchased and recycled, there is absolutely no way for any facility to know with certainty that every trace of mercury has been removed. Moreover, Alternative #1 recognizes that even salvage yards would not be able to remove all mercury switches from every end-of-life vehicle, such as from places where a vehicle "has sustained considerable damage from an accident". There is simply no way for steel mills to effectively monitor the incoming scrap steel (like what is currently done for radiation devices) to verify that all mercury has been removed. Thus, there would be no way for steel mills to monitor, insure or certify their compliance with the proposed prohibition. (ISEG)

*Comment:* Under both alternatives, Nucor questions: How will the rule be enforced? Will users of the scrap be under any obligations to verify that materials are mercury-free? What will be done with the vehicles for which the decision is made not to remove mercury switches? (NS)

*Response:* House Enrolled Act 1110-2006 (Public Law 170-2006) has provided a specific direction for revision to the rule that does not include restriction on the use of the scrap. It is not a requirement of the law or rule for the steel mills to monitor, insure or certify that the end-of-life vehicles are mercury free. If a business that recycles scrap metal only takes scrap metal that does not contain mercury, then the business may be exempt from state and federal law requiring additional air scrubbers to remove mercury.

**Regarding education:**

*Comment:* Second, education is necessary so recyclers know where switches are located. These switches are not all in the same place. Switches in the Anti-Locking Break Systems (ABS) are not as easy to remove because the vehicle needs to be placed on a raised rack for access. Again, education is needed for direction as to the where and how. ARI would like to be a part of this training and it would be in the best interest of everyone if we could prepare this training with the automakers who are the only ones who can provide us with the necessary information as to the location of these switches and the process for removing them. I think the association can also be involved in outreach to the recyclers in the state. We can all agree that if a recycler becomes a member of the ARI they will receive information and will be kept updated and informed as to the pertinent needs of this industry on an ongoing basis. (ARI)

*Comment:* Education and outreach to vehicle recycler is also critical for success. Adequate funding to conduct sustained, comprehensive education and technical assistance available to all salvage yards operating in the state is essential. (EC/ED)

*Comment:* The Alliance of Automobile Manufacturers supports the removal of mercury switches from end of life vehicles and a rule to implement a mercury switch collection program. Experience with existing switch collection programs indicates that mercury switches can be collected effectively from end of life vehicles with use of minimal time and resources. Information covering the topics listed below is summarized in the attachment. You may find this information helpful in developing an Indiana mercury switch recovery program: number of switches found per vehicle, in commerce removal of mercury switches, time required to remove switches from end of life vehicles, comparison of the effectiveness of existing collection programs, and costs for mercury recycling kits. Additionally, the Alliance has developed various educational tools to aid in switch removal. These tools include a DVD, brochure, and website which we would be happy to provide for the use in Indiana's switch collection program. (AAM)

*Response:* House Enrolled Act 1110-2006 (Public Law 170-2006) requires the removal of mercury switches from motor vehicles by the motor vehicle recycler and requires manufacturers of motor vehicles offered for sale in Indiana to develop and implement a plan to remove, collect, recover, and recycle or dispose of certain mercury switches from end-of-life vehicles. Education will be a key component of the automobile manufacturer's approved plan. IDEM appreciates the educational information and assistance for the motor vehicle recycler.

**Regarding liability:**

*Comment:* Liability is another issue that will need to be clarified because let's face it; this is a hazardous waste they will be dealing with. The mercury pellets are encased in a bullet type glass or plastic and as long as the recycler does not need to expose this mercury they will be safe from its exposure, furthermore, they will not need to worry about the rising cost of insurance due to this issue. A hold harmless clause will need to be created in case of any spill that may occur by accident. The bucket or container is another expense as is the cost of



picking up the switches and transporting them to the retorter. (ARI)

*Response:* House Enrolled Act 1110-2006 (Public Law 170-2006) requires the removal of mercury switches from motor vehicles by the motor vehicle recycler and requires manufacturers of motor vehicles offered for sale in Indiana to develop and implement a plan to remove, collect, recover, and recycle or dispose of certain mercury switches from end-of-life vehicles. Education will be a key component of the automobile manufacturer's approved plan and to assure the mercury is being managed in a sound manner.

**Regarding incentives:**

*Comment:* Third, an incentive will be needed for all of the reasons mentioned above, especially the time and effort for removing these switches that have no marketable value. Because many auto recycling business are small "Mom & Pop" operations, if you will, they can't afford to take time away from their business to remove these switches for nothing. Dismantlers in the recycling business aren't paid a great deal as it is so you can see why asking them to remove one more part, a non-marketable part, is an issue. An incentive program is the only way this project will be successful and productive. If bettering the environment is the ultimate goal then productivity is vital. All understand there will also be paperwork involved, however, keeping it at a minimum is crucial and again will be more productive. (ARI)

*Comment:* However, the ISEG also firmly believes that an incentive-based program, rather than a regulatory prohibition, is essential to encourage these types of operations to perform the removal function. There are a number of examples of enormously successful mercury switch removal incentive programs already implemented in nearby states that can be used as a template. In addition, regulatory requirements for proper management of the switches upon removal as "universal wastes" (40 CFR 273) already exists and the proposed rulemaking would arguably contain no additional requirements. (ISEG)

*Comment:* The key elements of a comprehensive mercury switch removal program include: financial incentives for dismantlers to remove switches, education & technical assistance, an ambitious capture rate goal and automaker responsibility. To the extent possible IDEM should consider addressing each of these elements in its rulemaking. A program containing these elements will ensure high capture rates, is cost effective and fair, and creates a needed incentive for automakers not to create similar hazards in future automobile designs. (EC/ED)

*Comment:* We believe that a financial incentive is necessary to ensure a high capture rate. The higher the incentive, the more switches will be collected. The amount of the incentive should reflect, as closely as possible, the actual cost of switch removal, record-keeping and transportation to a collection center. (EC/ED)

*Comment:* To be successful, a mercury switch removal program must include financial incentives for dismantlers or repair facilities to remove switches, education and technical assistance on proper removal and storage, and automaker responsibility. An incentive-based program will ensure a higher switch capture rate, will be more cost-effective, and will promote the use of safer components in future automobile designs. Programs that do not pay an incentive for switch removal, such as that proposed in this rulemaking notice, typically result in very low mercury switch recovery rates. (NS)

*Comment:* Moreover, states have more success achieving high switch recovery rates when financial incentives/bounties are provided. (NS)

*Comment:* Mercury is a lethal toxin to humans. In drafting your rules please consider: 4. the vehicle recyclers should be reimbursed for their trouble in retrieving the switches and properly disposing of them. (CWL)

*Response:* The Indiana law provides for a payment out of the solid waste management fund (SWMF) to a motor vehicle recycler for each mercury switch removed in an amount of at least \$1 and not more than \$5 as determined by the IDEM commissioner; and to the extent that the commissioner makes money available from the SWMF for that purpose. The universal waste rules will either be restated for the benefit of the regulated community or cross-referenced. The State will be working with the automobile manufacturer's association, End of Life Vehicle Solutions (ELVS) to approve a plan that will address education and technical assistance.

**Regarding updating blast furnaces:**

*Comment:* There is one more alternative, and that would be to update blast furnaces. This can be done and I have enclosed a letter and flow chart. I do not have the cost of what it would take, but I do know it would capture 100% of all mercury emission. If we truly are trying to remove mercury from our environment then that would be the solution. (ARI)

*Response:* House Enrolled Act 1110-2006 (Public Law 170-2006) requires the removal of mercury switches from motor vehicles by the motor vehicle recycler and requires manufacturers of motor vehicles offered for sale in Indiana to develop and implement a plan to remove, collect, recover, and recycle or dispose of certain mercury switches from end-of-life vehicles. This approach was adopted by the legislature to remove one of the sources of mercury before it reaches any high temperature steel recycling processes. As with many sources of pollution removal early in the process is easier than controlling it at the end of the process.

**Regarding capture rate:**

*Comment:* An ambitious switch capture rate goal is necessary in order to measure progress and make improvements to the program as necessary. It is critical to measure the number of switches recovered and establish appropriate program metrics at the initiation of any switch recovery program. Target capture goals, in terms of both number of switches and pounds of mercury, should be established. (EC/ED)



*Comment:* HEC urges IDEM to measure the capture rate in order to track the success of the program in preventing the release of mercury to the environment. The capture rate would be the number of mercury switches collected as a percentage of the total number of mercury switches in end-of-life vehicles for a given year. This data should be used each year to evaluate the switch retrieval program and to find ways in which to improve the capture rate. (HEC)

*Comment:* The goal of 100% switch removal is laudable but unrealistic, and implies that scrap metal used by steel manufacturers must be completely free of mercury switches. Discussions should take place concerning a more realistic goal, whether the same goal should apply to convenience lighting switches and to anti-lock brake switches. (NS)

*Response:* While House Enrolled Act 1110-2006 (Public Law 170-2006) did not establish specific goals it does provide recording and reporting requirements that will help measure progress. The rule will contain a component for record keeping, including the number of vehicles with mercury switches, how many switches are removed, the percentage of vehicles processed that contained mercury switches, etc. Please see [329 IAC 11.5-1-5](#).

**Regarding the definitions:**

*Comment:* We encourage IDEM to use a broad definition of the vehicles to which the rule applies to optimize the capture of mercury. The rule should apply to any vehicles which are sold, given away, otherwise conveyed to a vehicle recycler or scrap recycling facility for the purposes of recycling. (HEC)

*Response:* Most key words are defined by the statute, including end-of-life vehicle, mercury switch, and motor vehicle.

**Regarding recycling of mercury:**

*Comment:* Demand for recycled mercury has been dropping, so disposal of the switches may be difficult. HEC urges IDEM to be diligent in seeking the disposal mechanism with the least risk of releasing mercury. Even long term storage may have to be considered as the only solution that prevents environmental release of the mercury. Though this may be stating the obvious, these switches must not be incinerated as hazardous waste. Incineration of any mercury containing objects leads to air emissions of the mercury. (HEC)

*Response:* House Enrolled Act 1110-2006 (Public Law 170-2006) requires manufacturers of motor vehicles offered for sale in Indiana to develop and implement a plan to remove, collect, recover, and recycle or dispose of certain mercury switches from end-of-life vehicles. IDEM will evaluate the plan relative to proposed management of collected switches to assure environmental protection is provided.

**Regarding withdrawal of the rule:**

*Comment:* The Indiana Manufacturers Association echoes the concerns expressed by the steel industry and respectfully request that the rule be withdrawn and reworked before moving forward. (IMA)

*Response:* House Enrolled Act 1110-2006 (Public Law 170-2006) has provided direction for revision to the rule that is being incorporated into the draft rule language.

**SUMMARY/RESPONSE TO COMMENTS FROM THE CONTINUATION OF FIRST COMMENT PERIOD**

IDEM requested public comment from May 1, 2006, through May 31, 2006, on alternative ways to achieve the purpose of the rule and suggestions for the development of draft rule language. IDEM received comments from the following parties by the comment period deadline:

Kenneth Gear, Vice President, State Government Affairs,  
Alliance of Automobile Manufacturers (AAM)

Patrick M. Gorman, Facilitator, Indiana Steel Environmental Group (ISEG)

Following is the summary of the comments received and IDEM's responses thereto:

*Comment:* We strongly encourage the Indiana Department of Environmental Management (IDEM) to mirror any proposed regulation after the contents of the newly enacted statute (HB1110) to avoid confusion and the implementation of potentially inconsistent collection procedures. In 2005 the automobile industry created the End-Of-Life Vehicles Solutions Corporation (ELVS) to advance environmental efforts in the areas of vehicle recyclability, education and outreach, and the proper management of substance of concern from end-of-life vehicles. Representatives from ELVS have already met with IDEM personnel, including Commissioner Easterly, regarding establishment of the ELVS program in Indiana. The program has been implemented in a number of other states and we are confident the program will be successful in Indiana. ELVS provides educational materials to dismantlers, instructions on how to locate and remove switches, switch collection containers, transportation and proper disposal of mercury switches. Plus, auto manufacturers fund the entire program. With the help of IDEM and their accurate identification of vehicle dismantlers and scrap metal recyclers in the state, ELVS can begin operating in Indiana within weeks of plan approval. (AAM)

*Response:* IDEM agrees.

*Comment:* The first major concern of the ISEG regarding the proposed rulemaking relates to its utility. The ISEG strongly supports a program destined to encourage the removal of mercury switches from end-of-life vehicles by auto salvage yards, junk yards, auto dismantlers, or scrap metal dealers. (ISEG)

*Response:* Indiana law now requires the removal of convenience lights containing mercury from end of life

vehicles.

*Comment:* The ISEG also firmly believes that an incentive-based program is essential to encourage these types of operations to perform the mercury switch removal function. There are a number of examples of enormously successful mercury switch removal incentive programs already implemented in nearby states that can be used as a template. In addition, regulatory requirements for the proper management of the switches upon removal as "universal wastes" (40 CFR 273) already exist and the proposed rulemaking would arguably contain no additional requirements. (ISEG)

*Response:* The Indiana law provides for a payment out of the solid waste management fund (SWMF) to a motor vehicle recycler for each mercury switch removed in an amount of at least \$1 and not more than \$5 as determined by the IDEM commissioner; and to the extent that the commissioner makes money available from the SWMF for that purpose. The universal waste rules would apply.

*Comment:* The ISEG has no major objection to the recovery of anti-lock brake systems (ABS systems) from end-of-life vehicles. However, the authorizing legislation for this rule (HEA 110-2006) only defines "mercury switches" as being hood or truck lid switches (See I.C. 13-11-2-128.8(a)). Additionally, the proposed federal mercury switch agreement language does not include anti-lock brake systems. Therefore, the primary focus of the rulemaking should only regulate mercury switch removal from automobile hood and truck lids. ABS systems should not be included as a mandatory requirement. (ISEG)

*Response:* IDEM agrees, however, auto salvage yards, junk yards, auto dismantlers, or scrap metal dealers should be able to remove the ABS switch with or without the assembly and be reimbursed.

*Comment:* Another major concern of the ISEG is the implication that steel manufacturers would not be allowed to recycle scrap metal unless all mercury and mercury switches had been removed. Based on the large quantities of steel scrap purchased and recycled, there is absolutely no way for any facility to know with certainty that every trace of mercury has been removed. There is simply no way for steel mills to effectively monitor the incoming scrap steel similar to what is currently done for radiation devices to verify that all mercury has been removed. Thus, there would be no way for steel mills to monitor, insure or certify their compliance with the proposed prohibition. (ISEG)

*Response:* This is not a component of this rulemaking.

*Comment:* Finally, it is noted that the enabling legislation for this rulemaking expires "on the earlier or": 1) The date on which a national mercury switch recovery program takes effect, as determined by the commissioner; or 2) July 1, 2016. ([IC 13-20-17.7-9](#)) Based on current activities, it is expected that a national program will be implemented prior to 2016. As a result, the enabling legislation for this rulemaking will expire. A similar expiration date should be reflected in the rule. (ISEG)

*Response:* IDEM agrees and has added a repeal provision for the rule in case of that eventuality.

## REQUEST FOR PUBLIC COMMENTS

This notice requests the submission of comments on the draft rule language, including suggestions for specific revisions to language to be contained in the draft rule. Mailed comments should be addressed to:

#05-250(SWMB) [Mercury Switch Rule]

Marjorie Samuel

Rules, Planning, and Outreach Section

Office of Land Quality

Indiana Department of Environmental Management

100 North Senate Avenue

Indianapolis, Indiana 46206-6015.

Hand delivered comments will be accepted by the receptionist on duty at the eleventh floor reception desk, Office of Land Quality, 100 North Senate Avenue, Indianapolis, Indiana. Comment may be submitted by facsimile at the IDEM fax number (317) 232-3403, Monday through Friday, between 8:15 a.m. and 4:45 p.m. Please confirm the timely receipt of the faxed comments by calling (317) 232-7995.

## COMMENT PERIOD DEADLINE

Comments must be postmarked, faxed, or hand delivered by September 8, 2006.

Additional information regarding this action may be obtained from Lynn West, Rules, Planning, and Outreach Section, Office of Land Quality, (317)232-3593 or (800) 451-6027 (in Indiana).

## DRAFT RULE

SECTION 1. [329 IAC 11.5](#) IS ADDED TO READ AS FOLLOWS:

### ARTICLE 11.5. MERCURY SWITCHES

---

Rule 1. General Provisions

**[329 IAC 11.5-1-1](#) Purpose**

Authority: [IC 13-14-8-7](#); [IC 13-15](#); [IC 13-19-3](#)

Affected: [IC 13-20](#); [IC 36-9-30](#)

**Sec. 1.** The purpose of this article is to implement the provisions of Public Law 170-2006 requiring the removal of mercury switches from end-of-life vehicles.

(Solid Waste Management Board; [329 IAC 11.5-1-1](#))

**[329 IAC 11.5-1-2](#) Enforcement**

Authority: [IC 13-14-8-7](#); [IC 13-15](#); [IC 13-19-3](#)

Affected: [IC 13-20](#); [IC 36-9-30](#)

**Sec. 2.** This article will be enforced through [IC 13-30](#), as appropriate.

(Solid Waste Management Board; [329 IAC 11.5-1-2](#))

**[329 IAC 11.5-1-3](#) Incorporation by reference**

Authority: [IC 13-14-8-7](#); [IC 13-15](#); [IC 13-19-3](#)

Affected: [IC 13-20](#); [IC 36-9-30](#)

**Sec. 3.** Unless specified in the incorporated by reference documents incorporated in this article, the version of documents referenced in the incorporated by reference documents is the latest version that is in effect on the date of the latest adoption of the incorporated by reference documents in this article.

(Solid Waste Management Board; [329 IAC 11.5-1-3](#))

**[329 IAC 11.5-1-4](#) Records and standards for submitted information**

Authority: [IC 13-14-8-7](#); [IC 13-15](#); [IC 13-19-3](#)

Affected: [IC 13-20](#); [IC 36-9-30](#)

**Sec. 4. (a)** Any owner or operator of a motor vehicle recycler business in Indiana or any other person in Indiana that removes mercury switches from end-of-life vehicles is required to do the following:

- (1) Report annually to the department in a form or format specified by the department.
- (2) Submit the report by January 31 for the previous year.
- (3) Include the following:
  - (A) The number of each of the following:
    - (i) Vehicles with convenience switches that were processed by the business in a calendar year from January 1 through December 31 of the same year.
    - (ii) Convenience switches that have been removed during the calendar year from January 1 through December 31 of the same year.
    - (iii) Convenience switches that have been returned for processing in the calendar year from January 1 through December 31 of the same year.
    - (iv) Removed convenience switches that remain on site as of December 31.
    - (v) ABS switches that have been removed during the calendar year from January 1 through December 31 of the same year.
  - (B) The approximate percentage of the vehicles processed at the business that have convenience switches that contain mercury during the reporting calendar year.

(b) The owner or operator of a motor vehicle recycler business in Indiana or any other person in Indiana that removes mercury switches from end-of-life vehicles shall record and retain at the business in an operating record any records required by this article.

(c) All records required by this article shall be retained by the owner or operator of a motor vehicle recycler business in Indiana or any other person in Indiana that removes mercury switches from end-of-life vehicles:

- (1) for a period of three (3) years; or
- (2) until the rule expires or is repealed;

whichever is less.

(Solid Waste Management Board; [329 IAC 11.5-1-4](#))

#### **[329 IAC 11.5-1-5](#) Electronic submission of information**

Authority: [IC 13-14-8-7](#); [IC 13-15](#); [IC 13-19-3](#)

Affected: [IC 13-20](#); [IC 36-9-30](#)

Sec. 5. (a) Electronic submission of information that is required by this article may be requested by the commissioner. The format and submittal mechanism will be prescribed by the commissioner. Any information submitted on electronic media also must be submitted as a paper copy or copies, unless the commissioner makes a determination that only an electronic copy or a paper copy is needed.

(b) Electronically submitted information must meet the following requirements:

- (1) Section 4 of this rule.
- (2) The submittal deadlines of this article.

(Solid Waste Management Board; [329 IAC 11.5-1-5](#))

#### **[329 IAC 11.5-1-6](#) Rule compliance**

Authority: [IC 13-14-8-7](#); [IC 13-15](#); [IC 13-19-3](#)

Affected: [IC 13-20](#); [IC 36-9-30](#)

Sec. 6. (a) If a motor vehicle recycler in Indiana or other person in Indiana that removes convenience switches requests payment under [329 IAC 11.5-4-1](#), the:

- (1) owners or operators of a motor vehicle recycler business; or
- (2) other person that removes convenience switches;

may be subject to inspection by a department representative to verify that only convenience switches and ABS switches that contain mercury are being sent for processing.

(b) A motor vehicle recycler in Indiana or other person in Indiana that removes convenience switches must obtain documentation that an intentionally crushed vehicle has had the convenience switch removed and recycled.

(Solid Waste Management Board; [329 IAC 11.5-1-6](#))

#### **[329 IAC 11.5-1-7](#) Statutory expiration effect**

Authority: [IC 13-14-8-7](#); [IC 13-15](#); [IC 13-19-3](#)

Affected: [IC 13-20](#); [IC 36-9-30](#)

Sec. 7. If the authorizing statute expires, the rule is considered repealed after sixty (60) days.

(Solid Waste Management Board; [329 IAC 11.5-1-7](#))

## Rule 2. Definitions

### [329 IAC 11.5-2-1](#) Definitions

Authority: [IC 13-14-8-7](#); [IC 13-15](#); [IC 13-19-3](#)

Affected: [IC 13-11-2](#); [IC 13-20](#); [IC 36-9-30](#)

Sec. 1. The definitions in [IC 13-11-2](#) and this rule apply throughout this article.

(Solid Waste Management Board; [329 IAC 11.5-2-1](#))

### [329 IAC 11.5-2-2](#) "Container" defined

Authority: [IC 13-14-8-7](#); [IC 13-15](#); [IC 13-19-3](#)

Affected: [IC 13-20](#); [IC 36-9-30](#)

Sec. 2. "Container" means the collection device provided by the automobile manufacturers through an automobile manufacturer's alliance to the motor vehicle recycler or other person removing convenience switches. This container:

- (1) provides storage at the business; and
- (2) must comply with the universal waste regulations for transportation.

(Solid Waste Management Board; [329 IAC 11.5-2-2](#))

### [329 IAC 11.5-2-3](#) "Motor vehicle recycler" defined

Authority: [IC 13-14-8-7](#); [IC 13-15](#); [IC 13-19-3](#)

Affected: [IC 13-11-2-130.3](#); [IC 13-20](#); [IC 36-9-30](#)

Sec. 3. "Motor vehicle recycler" has the meaning set forth in [IC 13-11-2-130.3](#).

(Solid Waste Management Board; [329 IAC 11.5-2-3](#))

## Rule 3. Anti-Lock Brake System (ABS) Allowance

### [329 IAC 11.5-3-1](#) ABS allowance

Authority: [IC 13-14-8-7](#); [IC 13-15](#); [IC 13-19-3](#)

Affected: [IC 13-20](#); [IC 36-9-30](#)

Sec. 1. At the discretion of:

- (1) the owner or operator of a motor vehicle recycler business in Indiana; or
- (2) any other person in Indiana that removes mercury switches from end-of-life vehicles; anti-lock brake mercury pellets or assemblies that contain mercury may be removed, collected, and sent for processing with convenience switches and payment requested under [329 IAC 11.5-4-1](#).

(Solid Waste Management Board; [329 IAC 11.5-3-1](#))

## Rule 4. Mercury Switch Removal, Storage, and Disposal Requirements

### [329 IAC 11.5-4-1](#) Mercury switch removal, storage, and disposal requirements

Authority: [IC 13-14-8-7](#); [IC 13-15](#); [IC 13-19-3](#)

Sec. 1. (a) All owners or operators of a motor vehicle recycler business in Indiana are required to remove and collect convenience switch mercury pellets or assemblies and may collect ABS switches or assemblies from end-of-life vehicles upon the effective date as required by [IC 13-20-17.7-5\(a\)](#). Any other person in Indiana that removes mercury switches or ABS switches containing mercury from end-of-life vehicles must do so in accordance with this article.

(b) The convenience switch mercury pellets or assemblies and ABS switches or assemblies that contain mercury must be stored in a container that meets the definition at [329 IAC 11.5-2-2](#).

(c) Each container must contain not more than four hundred fifty (450) pellets.

(d) If the container, provided to the owners or operators of a motor vehicle recycler business in Indiana by the automobile manufacturers, is used and sent to the mercury processor specified by the automobile manufacturer in the approved plan required by [IC 13-20-17.7-2](#), then the requirements for mercury containing devices under the universal waste requirements are considered to be met for storage, transportation, recycling, and disposal.

(Solid Waste Management Board; [329 IAC 11.5-4-1](#))

## Rule 5. Payment Procedure

### [329 IAC 11.5-5-1](#) Payment procedure

Authority: [IC 13-14-8-7](#); [IC 13-15](#); [IC 13-19-3](#)

Affected: [IC 9-22-4](#); [IC 13-20](#); [IC 36-9-30](#)

Sec. 1. (a) As follows, owners or operators of a motor vehicle recycler business in Indiana or any other person in Indiana that removes mercury switches from end-of-life vehicles:

- (1) May submit a request to the department for reimbursement under subsection (c).
- (2) Must record and submit the following to the department when requesting reimbursement:
  - (A) A list of the make, model, and year of each vehicle that had convenience switches or ABS switches that contain mercury removed.
  - (B) The number of switches taken from that vehicle.
- (3) Must submit for reimbursement the following information:
  - (A) The facility's salvage motor vehicle business license number, as issued by the Indiana bureau of motor vehicles under [IC 9-22-4](#), as implemented under [140 IAC 3-3](#).
  - (B) The number of:
    - (i) convenience switches; and
    - (ii) ABS switches;removed, collected, and transported to the mercury processor.

(b) The owners or operators of a motor vehicle recycler business in Indiana or any other person in Indiana that removes mercury switches from end-of-life vehicles that submit the information required by this section for reimbursement must sign an affidavit as part of the submitted information stating the following:

- (1) The convenience switches and ABS switches that were removed and sent for processing contained mercury.
- (2) All information submitted is true and accurate.

(c) Based on the submitted information, the department will pay three dollars (\$3) for each convenience switch pellet and five dollars (\$5) for each ABS switch assembly that contains mercury as the commissioner appropriates the funds.

**(d) It is a violation of this article to submit a request for reimbursement for convenience switches and ABS switches that do not contain mercury.**

*(Solid Waste Management Board; [329 IAC 11.5-5-1](#))*

[Notice of First Meeting/Hearing](#)

*Posted: 08/09/2006 by Legislative Services Agency*

An [html](#) version of this document.