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 NO. 124155
 

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 IN THE  
 SUPREME COURT OF ILLINOIS
 

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HORSEHEAD CORPORATION,	)	Petition for Leave to Appeal
	)	from the Illinois Appellate
Appellant-Petitioner	)	Court, First District, First Division
	)	No. 1-17-2802
	)	
v.	)	There on Appeal
	)	from the Illinois Independent Tax Tribunal,
	)	No. 14-TT-227.
ILLINOIS DEPARTMENT OF REVENUE	)	
and	)	Chief Administrative Law Judge
	)	James M. Conway, Presiding
	)	
ILLINOIS INDEPENDENT TAX	)	
TRIBUNAL	)	
	)	
Appellees-Respondents	)	
	)	

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 BRIEF OF APPELLANT-PETITIONER  
 HORSEHEAD CORPORATION
 

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**ORAL ARGUMENT REQUESTED**

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### NATURE OF THE CASE

This case involves the Illinois Use Tax Act's exemption for chemicals that "effect a direct and immediate change" upon a product being manufactured, 35 ILCS 105/3-50(4), and whether that exemption applies to Horsehead Corporation's purchases of metallurgical coke for use in its Waelzing process.<sup>1</sup> Metallurgical coke is a solid material consisting almost entirely of carbon. A22-A23; A27-A28.<sup>2</sup> When coke (solid carbon) is heated to its reactive temperature within the Waelzing process, the carbon naturally oxidizes, turning to gaseous carbon monoxide that retains the original carbon component. That carbon monoxide (oxidized carbon) reacts directly with the products being manufactured, immediately changing their chemical compositions. A22-A23.

Finding that the chemical exemption did not apply, the Illinois Department of Revenue (the "Department") issued two Notices of Tax Liability (the "Notices") assessing use tax, plus interest and late-filing and late-payment penalties, on Horsehead's coke purchases during the period from January 1, 2007, through June 30, 2011. A4; A18. Horsehead timely filed a petition for review of the Notices with the Illinois Independent Tax Tribunal (the "Tribunal"), an adjudicative body that is separate and independent from the agency that administers and enforces the Use Tax Act, *i.e.*, the Department.

The Tribunal affirmed the Notices in their entirety, ruling that Horsehead's coke does not satisfy the plain meaning of the phrase "effect a direct and immediate change"

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<sup>1</sup> On May 1, 2017, Horsehead Corporation changed its name to American Zinc Recycling Corp.

<sup>2</sup> The administrative record on appeal contains three common law volumes. The appendix to this Brief, cited "A1-A38," consists of the Appellate Court's Opinion (A1-A17), the Tribunal's Final Judgment Order (A18-A34), and the Record on Appeal Table of Contents. The supplemental appendix to this Brief, cited "SA1-SA24," consists of certain other items set forth in the table of contents thereto.



on a hyper-technical reading. It reasoned that it is carbon monoxide gas (*i.e.*, oxidized carbon), and not coke (*i.e.*, solid carbon), that directly and immediately reacts with the products being manufactured. A26. Based on its own determination that the law was clear and Horsehead's interpretation was wrong, the Tribunal also incorrectly ruled that Horsehead did not satisfy the "reasonable cause" standard for penalty abatement. A32-A33. Horsehead timely appealed the Tribunal's order to the Appellate Court of Illinois, First District. Reviewing the Tribunal's interpretation of the chemical exemption under the deferential "clearly erroneous" standard, the Appellate Court affirmed, *Horsehead Corp. v. Dep't of Revenue*, 2018 IL App (1st) 172802, A1-A17. On January 31, 2019, this Court accepted Horsehead's timely Petition for Leave to Appeal.

No questions are raised on the pleadings.

### ISSUES PRESENTED

**Issue 1.** The Tribunal does not have the authority to enforce the State tax laws or promulgate any regulations thereunder, but rather bears precisely the same relationship to the State tax laws as the circuit courts. Did the Appellate Court err in granting deference to the Tribunal's ruling on an issue of first impression regarding the meaning of the phrase "effect a direct and immediate change" in the chemical exemption to the Use Tax Act?

**Issue 2.** The Use Tax Act exempts chemicals that "effect a direct and immediate change" upon a product being manufactured. Horsehead purchases metallurgical coke (solid carbon) for use in its refining process. When that coke is heated to its reactive temperature within that process, the carbon naturally oxidizes, turning to gaseous carbon monoxide that retains the original carbon component. That carbon monoxide reacts

directly with the products being manufactured, immediately changing their chemical compositions. Does coke qualify for the chemical exemption?

**Issue 3.** Penalties are required to be abated when a taxpayer demonstrates “reasonable cause” for its position, including by showing that its interpretation of the law was reasonable. Here, the chemical exemption’s key terms were undefined and had not been interpreted by any precedential authority. Horsehead’s interpretation was consistent with a normal understanding of what it means to “effect a direct and immediate change,” and there was no authority suggesting that interpretation was wrong. Assuming *arguendo* that Horsehead’s coke purchases were not exempt, did the Tribunal err in failing to abate penalties?

#### STATUTES AND REGULATIONS INVOLVED

The Illinois Use Tax Act, 35 ILCS 105/1 *et seq.*, imposes a tax on the privilege of using in Illinois tangible personal property purchased at retail from a retailer. 35 ILCS 105/3. The Use Tax Act sets forth a number of exemptions from the use tax, including a manufacturing machinery and equipment exemption (the “MM&E exemption”), which provides in relevant part:

§ 3-5. Exemptions. Use of the following tangible personal property is exempt from the tax imposed by this Act:

\* \* \*

(18) Manufacturing and assembling machinery and equipment used primarily in the process of manufacturing or assembling tangible personal property for wholesale or retail sale or lease .... 35 ILCS 105/3-5(18).

The Use Tax Act defines “equipment” to include certain chemicals:

(4) “Equipment” includes ... chemicals or chemicals acting as catalysts but only if the chemicals or chemicals acting as catalysts effect a

direct and immediate change upon a product being manufactured or assembled for wholesale or retail sale or lease. 35 ILCS 105/3-50(4).

The Department promulgated a regulation interpreting the MM&E exemption: 86

Ill. Adm. Code 130.330. That regulation addresses the exemption for chemicals and chemicals acting as catalysts and provides examples of qualifying chemicals:

(c) Machinery and Equipment.

\* \* \*

*(6) The exemption includes chemicals or chemicals acting as catalysts but only if the chemicals or chemicals acting as catalysts effect a direct and immediate change upon a product being manufactured or assembled for sale or lease. (Section 2-45 of the Act) The following examples are illustrative:*

A. Example 1. A chemical acid is used to etch copper off the surface of a printed circuit board during the manufacturing process. The acid causes a direct and immediate change upon the product. The acid qualifies for the exemption.

B. Example 2. An aluminum oxide catalyst is used in a catalytic cracking process to refine heavy gas oil into gasoline. In this process, large molecules of gas oil or feed are broken up into smaller molecules. After the catalyst is injected into the feed and used in the cracking process, it is drawn off and reused in subsequent manufacturing processes. The catalyst qualifies for the exemption. 86 Ill. Adm. Code 130.330(c)(6).

The Notices imposed on Horsehead late-payment and late-filing penalties under the Uniform Penalty and Interest Act (the "UPIA"), 35 ILCS 735/3-8, incorporated by reference in the Use Tax Act, 35 ILCS 105/12. The UPIA has a "reasonable cause" exception to the imposition of these penalties:

§ 3-8. No penalties if reasonable cause exists. The penalties imposed under the provisions of Sections 3-3, 3-4, 3-5, and 3-7.5 of this Act shall not apply if the taxpayer shows that his failure to file a return or pay tax at the required time was due to reasonable cause. Reasonable cause shall be determined in each situation in accordance with the rules and regulations promulgated by the Department. ... 35 ILCS 735/3-8.

The Department's regulations describe the circumstances supporting a finding of "reasonable cause" for the abatement of penalties, and provide in relevant part:

(b) The determination of whether a taxpayer acted with reasonable cause shall be made on a case by case basis taking into account all pertinent facts and circumstances. The most important factor to be considered in making a determination to abate a penalty will be the extent to which the taxpayer made a good faith effort to determine his proper tax liability and to file and pay his proper liability in a timely fashion. Ill. Adm. Code 700.400(b).

(c) A taxpayer will be considered to have made a good faith effort to determine and file and pay his proper tax liability if he exercised ordinary business care and prudence in doing so. A determination of whether a taxpayer exercised ordinary business care and prudence is dependent upon the clarity of the law or its interpretation and the taxpayer's experience, knowledge, and education. Accordingly, reliance on the advice of a professional does not necessarily establish that a taxpayer exercised ordinary business care and prudence, nor does reliance on incorrect facts such as an erroneous information return. Ill. Adm. Code 700.400(c).

#### **STATEMENT OF FACTS AND PROCEDURAL HISTORY**

Horsehead is a leading recycler of electric arc furnace dust ("EAF Dust"), a steel mill by-product composed of iron, zinc, and other trace elements. A3; A21. Horsehead operates a refinery in Illinois, where it recycles EAF Dust into crude zinc oxide and iron oxide rich material, which Horsehead sells to third parties. A3; A21, A23-A24. Horsehead extracts these products from EAF Dust using a "Waelzing process," so named based on the Waelz kilns in which the process takes place. A3-A4; A21-22.

Horsehead purchases metallurgical coke—a solid material consisting almost entirely of carbon—for use in its Waelzing process. A3; A22-A23, A27-A28. After using external burners to preheat the kiln, Horsehead feeds the coke and EAF Dust into the kiln, where they begin to dry out and heat up. A3; A22. Solely as result of being heated to its reactive temperature of between 600-700 degrees centigrade within the Waelz kiln, the

coke's solid carbon naturally oxidizes—*i.e.*, attracts an oxygen molecule—turning to gaseous carbon monoxide that retains the original carbon component.<sup>3</sup> *Id.* That carbon monoxide (*i.e.*, oxidized coke) reacts directly with the zinc and iron oxides in the EAF Dust, immediately reducing them to metallic iron and zinc vapor and allowing them to be separated into the products that Horsehead sells. A4; A23.

Certain of the reactions comprising the Waelzing process are exothermic reactions. *Id.* This means they themselves generate the heat necessary to cause the remaining coke (solid carbon) to oxidize to additional carbon monoxide gas, which directly and immediately reduces the remaining zinc and iron oxides in the EAF Dust. *Id.* Thus, once the Waelzing process gets going, it runs as a continuous and self-sustaining cycle until virtually all of the coke is consumed. *Id.*

#### **Procedural History**

During the periods at issue, Horsehead believed the metallurgical coke purchased for use in this Waelzing process qualified for exemption under the Use Tax Act as a chemical that “effect[s] a direct and immediate change upon a product being manufactured or assembled for wholesale or retail sale or lease.” 35 ILCS 105/3-50(4). Following an audit, however, the Department concluded that the coke did not qualify for the chemical exemption and issued two Notices of Tax Liability assessing use tax, plus interest and late-filing and late-payment penalties, on Horsehead's coke purchases during the period from January 1, 2007, through June 30, 2011. A4; A18. Horsehead timely filed a petition for review of the Notices with the Tribunal.

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<sup>3</sup> Put differently, carbon monoxide (CO) is nothing more than one atom of carbon (C) from the coke that has bonded with one atom of oxygen (O) from the air. This

Following discovery, a final hearing, and the submission of post-hearing briefs by both parties, the Tribunal issued a Final Judgment Order affirming the Notices in their entirety. The Tribunal determined that Horsehead's coke does not "effect a direct and immediate change" because "[s]imply placing coke next to zinc oxide or zinc does not create any chemical reaction whatsoever, a point conceded by Horsehead's own witnesses." A26. The Tribunal's interpretation of the phrase "effect direct and immediate change" was based solely on the definitions of "direct" and "immediate" in the Oxford Living Dictionary. A25.

Next, based solely on its own determination that the chemical exemption's language was clearly defined, and that it disagreed with Horsehead's understanding of the exemption, the Tribunal found that Horsehead did not satisfy the "reasonable cause" standard for penalty abatement. A32-A33. In making this determination, the Tribunal did not consider how a taxpayer exercising ordinary business care and prudence would have interpreted the exemption in light of the absence of statutory and regulatory definitions and guiding case law. The Tribunal thus affirmed the imposition of penalties as set forth in the Notices. A33.

Horsehead timely filed a petition for review in the Appellate Court. After determining that the Tribunal's matter-of-first-impression interpretation of the chemical exemption is entitled to deference, the Appellate Court ruled that the Tribunal did not commit "clear error" in determining that Horsehead's coke purchases did not qualify for the chemical exemption. A13. The Appellate Court also ruled that the Tribunal's decision

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"oxidation reaction" allows the coke's solid carbon to turn to gaseous carbon monoxide that reacts with the solid zinc and iron oxides in the EAF Dust. A23.

to uphold the penalties asserted in the Notices was not “against the manifest weight of the evidence.” A17.

### ARGUMENT

The Appellate Court’s rulings on each of the issues presented in this case were in error and should be reversed.

*First*, this case presents an issue of first impression regarding the meaning of statutory language, a question of law for which review is *de novo*. *E.g.*, *Goodman v. Ward*, 241 Ill. 2d 398, 406 (2011). Moreover, in any event, including if this case presents a mixed question of law and fact (which it does not), the Appellate Court still erred in granting deference to the Tribunal—an independent, adjudicative body without authority to administer or enforce the tax statutes. Reviewing the Tribunal’s decisions under a more deferential standard than the one applied to circuit court decisions rendered on the same types of tax disputes raises significant issues of procedural fairness and is antithetical to the Tribunal’s statutory goal of “increas[ing] public confidence in the fairness of the State tax system,” 35 ILCS 1010/1-5(a).

*Second*, the Tribunal, and the Appellate Court in affirming the Tribunal, erred in adopting a definition of “direct and immediate” that excludes all intervening factors and intermediate steps. This overly narrow definition was taken from a single, general purpose dictionary’s definitions of “direct” and “immediate.” It is inconsistent with legal dictionaries’ definitions of “direct” and “immediate” causation, a typical understanding of what it means to “effect a direct and immediate change,” legislative intent, and every other persuasive authority that has been identified in this case.

*Third*, even if Horsehead’s coke does not qualify for the chemical exemption (which it does), the Tribunal’s and the Appellate Court’s decision to uphold the

imposition of penalties in this case borders on the absurd. Horsehead's position was, at the very least, reasonable, and penalties must be abated.

**I. The Tribunal's interpretation of the chemical exemption and its application to the undisputed facts is reviewed *de novo*.**

The facts in this case are not in dispute. The sole issue is whether the phrase "effect a direct and immediate change" as used in the chemical exemption allows for intervening factors or intermediate steps that do not either disrupt the natural sequence of events or terminate the chemical's involvement. This is a legal issue of first impression at the appellate level that is entitled to *de novo* review. The Appellate Court erred when it reviewed the Tribunal's interpretation of the statute under the deferential "clearly erroneous" standard. This is so for two reasons.

*First*, the statutory phrase "effect a direct and immediate change" has not previously been interpreted at the appellate level. Thus, in applying this language to the undisputed facts in this case, the Tribunal necessarily had to determine what that language means. Disputes regarding the proper interpretation of statutory language are reviewed *de novo*. *E.g., Goodman*, 241 Ill. 2d at 406 ("[W]here the historical facts are admitted or established, but there is a dispute as to whether the governing legal provisions were interpreted correctly by the administrative body, the case presents a purely legal question for which our review is *de novo*.").

*Second*, even if the Appellate Court is correct that this case presents a "mixed question of law and fact" (which it does not), the Appellate Court still erred in granting deference to the Tribunal's ruling. The Tribunal's decisions should be reviewed under the same non-deferential standard applied to the circuit court decisions rendered on the exact same types of use tax disputes.



Like circuit courts, the Tribunal does not have the authority to either administer or enforce the Use Tax Act, or any other tax law, nor does it promulgate any regulations thereunder. Instead, the Tribunal is “an **independent** administrative tribunal with tax expertise to resolve tax disputes” between taxpayers and the Department, 35 ILCS 1010/1-5(a) (emphasis added). That is, the Tribunal bears the same relationship to the tax laws as do the circuit courts, whose decisions on questions of law (including mixed questions of law and fact) in these types of tax disputes are reviewed *de novo*. *E.g.*, *Hartney Fuel Oil Co. v. Hamer*, 2013 IL 115130, ¶ 16 (in an appeal from protest monies action brought in respect of Department’s audit findings, reviewing issues of statutory interpretation *de novo* and specifying that factual determinations are reviewed under the manifest weight of the evidence standard); *Samour, Inc. v. Bd. of Election Comm’rs of City of Chicago*, 224 Ill. 2d 530, 542 (2007) (limiting clearly erroneous review to mixed questions of law and fact from an administrative agency).<sup>4</sup>

There is nothing in this Court’s jurisprudence to justify a different standard of review for the Tribunal’s legal decisions. To the contrary, adopting a rule of special deference to the Tribunal would undermine the Tribunal’s express purpose of “increas[ing] public confidence in the State tax system” by providing “both the appearance and the reality of due process and fundamental fairness.” 35 ILCS 1010/1-5.

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<sup>4</sup> The appellate court in *Hartney* made the point plainly, noting that courts apply a “dual standard of review” to decisions from circuit courts, reviewing “legal issues *de novo* and factual issues under a manifest weight of the evidence standard,” and that the Illinois Supreme Court “has only applied the clearly erroneous standard to decisions of administrative agencies,” and “has expressly chosen to apply the . . . dual standard ‘[i]n all other civil cases.’” *Samour*, 224 Ill. 2d at 542.” *Hartney Fuel Oil Co. v. Hamer*, 2012 IL App (3d) 110144, ¶ 34, *rev’d on other grounds*, 2013 IL 115130.

By way of background, a taxpayer that disagrees with the Department's audit findings in a matter falling within the Tribunal's jurisdiction generally has two options: she can either file a petition with the Tribunal or pay the disputed liability under protest and bring a refund suit in circuit court. 35 ILCS 1010/1-45 (providing Tribunal's original exclusive jurisdiction, subject to, *inter alia*, the Protest Monies Act, 30 ILCS 230/1 *et seq*). Under the Appellate Court's ruling, the Tribunal's conclusions on mixed questions of law and fact would be reviewed for clear error, while those of the circuit courts would be reviewed *de novo*. Compare A7 (reviewing purported mixed question of law and fact from the Tribunal for clear error), with *Samour*, 224 Ill. 2d at 542 (limiting clearly erroneous review to mixed questions of law and fact from an administrative agency).

A two-track system with unequal appeal rights will result in taxpayers who wish to take full advantage of the error-correcting function of appellate review choosing to bypass the Tribunal and bring refund actions in circuit court. Because this forum choice is available only to those taxpayers who can afford to "pay-to-play," a rule of special deference to the Tribunal will *increase* wealth-based disparities and *decrease* "public confidence in the fairness of the State tax system." The Tribunal's statutory mandate thus necessitates that its legal decisions be reviewed in the same non-deferential manner as those of the circuit courts.

**A. The meaning of the statutory phrase "direct and immediate change" is a legal issue of first impression that is reviewed *de novo*.**

The statutory phrase "effects a direct and immediate change" has not previously been interpreted at the appellate level. The Appellate Court itself acknowledged as much. A15-A16 (recognizing that before it considered the exemption for chemicals that "effect a direct and immediate change" upon a product being manufactured, "there was no

controlling case law on how those terms should be interpreted within the context of the chemical exemption"). Thus, the Tribunal necessarily had to first ascribe some meaning to that language in order to determine how it should apply to Horsehead's coke. Issues of first impression regarding the correct interpretation of a statute are entitled to *de novo* review, a standard characterized as "independent and not deferential." *Goodman* 241 Ill. 2d at 406; accord *MD Elec. Contractors, Inc. v. Abrams*, 228 Ill. 2d 281, 286 (2008) (applying *de novo* review to statutory interpretation issue of first impression).

In treating this legal question of first impression as a mixed question of law and fact, the Appellate Court misunderstood the issue. *Goodman* draws a clear distinction between clear error and *de novo* review that is helpful here. *Goodman*, 241 Ill. 2d at 406. When the facts are agreed to and the meaning of the governing rule is established, but *the application of* that rule to those facts is in dispute, it is a mixed question of law. *Id.* But that is not the situation here. Here, the facts are agreed to but *the meaning of* the governing legal rule is in dispute. This scenario is reviewed *de novo*. *Id.*

It is clear from the Tribunal's Order that this issue presents the second *Goodman* scenario, for which review is *de novo*. For example, the Tribunal expressly states that in order for it to determine whether Horsehead's coke qualifies for the chemical exemption, the statutory language must be "reviewed and interpreted." A25. And, the Tribunal acknowledges the lack of any statutory or regulatory definitions or controlling authority to guide its interpretation, thus belying any suggestion that it was applying an established legal principle as required to fall within the first *Goodman* scenario. A29, A33. For this reason, the Appellate Court erred and this Court should conduct its own *de novo* review.

**B. The Tribunal's conclusions of law are not entitled to special deference.**

*Even if* the issue here is a mixed question of law and fact (which it is not), the Tribunal's ruling still should be reviewed *de novo*—just as it would be if rendered by a circuit court.

**1. Neither the Administrative Review Law nor this Court's jurisprudence justifies special deference to the Tribunal's legal conclusions.**

With respect to the tax laws, the Tribunal's posture is the same as a circuit court and thus different from a typical agency, *i.e.*, the Tribunal, unlike an agency, is a fair and independent interpreter of the statutes enacted by the legislature and regulations promulgated by the Department. *See* 35 ILCS 1010/1-5(a). The circuit court's decisions on questions of law, including mixed questions of law and fact, in these same types of tax disputes are reviewed *de novo*. *See supra* p. 10. Neither the Administrative Review Law nor this Court's precedent justify—let alone require—applying a more deferential standard of review to the Tribunal's legal decisions.

Upon judicial review, Illinois law requires courts to give deference to *only* the Tax Tribunal's findings and conclusions on questions of fact, none of which are challenged here. The Illinois Independent Tribunal Act of 2012, 35 ILCS 1010/1-1 *et seq.* (the "Tax Tribunal Act"), provides that taxpayers "are entitled to judicial review of a final decision of the Tax Tribunal in the Illinois Appellate Court, in accordance with Section 3-113 of the Administrative Review Law," 35 ILCS 1010/1-75(a). Section 3-110 in turn provides that "[t]he hearing and determination shall extend to all questions of law and fact presented by the entire record before the court," and "[t]he findings and conclusions of the administrative agency on questions of fact shall be held to be prima

facie true and correct,” 735 ILCS 5/3-110 (emphasis added). The Administrative Review Law is silent as to the standard of review that applies to an administrative agency’s conclusions on questions of law or mixed questions of law and fact.

Whether and when an agency’s legal conclusions and mixed questions are entitled to deference is established by this Court’s precedent. That precedent does not require deference to the Tribunal. Case law has established that an administrative agency receives deference in interpreting *the agency’s* own regulations and making decisions based on the statutes *the agency* enforces. *E.g., Citibank, N.A. v. Ill. Dep’t of Revenue*, 2017 IL 121634, ¶ 39 (courts “will give substantial weight and deference to an interpretation of an ambiguous statute by the agency charged with administering and enforcing that statute”); *Hartney*, 2013 IL 115130, ¶ 59 (“Administrative agencies likewise are entitled to deference in interpreting the statutes they enforce.”); *Mattis v. State Universities Ret. Sys.*, 212 Ill. 2d 58, 76 (2004) (courts give deference “to the interpretation of a statute by the agency charged with its administration.”). Since in this case the Tribunal has neither rule-making nor enforcement powers with respect to any tax law (Use Tax Act or otherwise), it does not qualify for deference to its decisions of law. Indeed, Horsehead is unaware of any case in which an Illinois higher court has deferred to an independent administrative agency’s legal decision with respect to a statute it neither administers nor enforces.

Notwithstanding the Tribunal’s judicial role vis-à-vis the State tax laws, the Appellate Court ruled that this Court requires deference to the Tribunal’s interpretation of the chemical exemption due to the “express legislative mandate that the tax tribunal

possess and employ tax expertise in resolving tax disputes.”<sup>5</sup> A8 (referencing 35 ILCS 1010/1-5(a)). This ruling is simply not correct.

In support, the Appellate Court relied exclusively on this Court’s general statement in *AFM Messenger Serv., Inc. v. Dep’t of Emp. Sec.*, 198 Ill. 2d 380 (2001), that there is “wisdom [in] judicial deference to an agency’s experience and expertise.” *Id.* at 394. However, *AFM* and the cases it collected in deciding to defer to the Department of Employment Security’s decision on a mixed question of law and fact each dealt with administrative bodies that—unlike the Tribunal—derived their “experience and expertise” from either enforcing or administering the underlying statute or provision at issue. *See id.* at 394-95 (collecting cases); *see also Abrahamson v. Ill. Dep’t of Prof’l Regulation*, 153 Ill. 2d 76, 97-98 (1992) (implying that experience and expertise is a function of administering and enforcing a statute); *Ill. Consol. Tel. Co. v. Ill. Commerce Comm’n*, 95 Ill. 2d 142, 152-53 (1983) (same). *AFM* is thus entirely consistent with the principle that deference to an administrative agency depends upon the agency’s role as either an administrator or enforcer of the statute at issue.

The Appellate Court’s decision to grant deference to the Tribunal despite its purely judicial role vis-à-vis the Use Tax Act is an unwarranted expansion of this Court’s jurisprudence and should not be allowed to stand.

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<sup>5</sup> Based upon publicly available information, since its inception, the Tax Tribunal has issued decisions in a total of 17 cases. <https://www2.illinois.gov/sites/taxtribunal/decisions/Pages/default.aspx> (last visited Feb. 25, 2019). The Tax Tribunal is charged with resolving disputes under 22 distinct State tax acts, including the Income Tax Act, the Use Tax Act, the Cigarette Tax Act, the Coin-Operated Amusement Device and Redemption Machine Tax Act, and the Public Utilities Revenue Act. 35 ILCS 1010/1-45(a).

2. *Special deference to the Tribunal would undermine its statutory purpose of “increas[ing] public confidence in the fairness of the State tax system.”*

The Tax Tribunal Act was established to serve as an alternate, independent “tax-expert forum” for resolving tax disputes, with the statutory intent being to “increase public confidence in the fairness of the State tax system” by providing “both the appearance and the reality of due process and fundamental fairness.” 35 ILCS 1010/1-5. Granting more deference to the Tribunal’s legal decisions than to those of the circuit courts raises significant concerns of procedural fairness and uniformity in tax cases. It is antithetical to the Tribunal’s statutory intent and thus in direct conflict with the express mandate that the Tax Tribunal Act “be construed liberally to further this intent,” 35 ILCS 1010/1-5(c).

*First*, given that taxpayers can—absent financial constraints—choose whether to litigate use tax disputes at the Tribunal *or* in the circuit court (*see supra* p. 10), it is reasonable to expect that taxpayers would more often choose to litigate a new issue of law in the circuit courts if the Tribunal’s decisions receive greater deference on appeal. This is because a loss at the Tribunal would be relatively more difficult to reverse on appeal, such that taxpayers would effectively get only one shot in a case originating at the Tribunal, but two bites at the apple in a case originating at the circuit court. Fewer cases being brought before the Tribunal would hinder the Tribunal’s development as a “tax-expert” forum.

*Second*, this system would give rise to socio-economic disparities. Because the circuit court is a refund forum, only those taxpayers who can afford to pay the disputed liability in advance actually have a forum choice. *Hartney*, 2013 IL 115130, ¶ 18. Those

who cannot afford to do so have no option but to bring their case in the Tribunal. When paired with unequal appeal rights under a rule of special deference to the Tribunal, this results in a system that favors wealthier taxpayers relative to those of more modest means.

For example, assume two taxpayers dispute the same mixed issue of law and fact with the Department. Taxpayer A has large cash reserves, while Taxpayer B is experiencing cash-flow struggles. Further assume that in a previous case, the Tribunal decided the same issue in favor of the Department. In this scenario, the logical forum choice would be the circuit court. However, because the circuit court is a refund forum, taxpayers can only bring their actions there by making full payment of the disputed liability. Taxpayer A has the financial means to make full payment, and thus is able to avail herself of the preferred forum. Taxpayer B, on the other hand, lacks the necessary resources to pay the liability and thus has no option but to litigate the issue in the Tribunal, where she will almost certainly lose. And, under a rule of deference, Taxpayer B will have little chance of prevailing on appeal. A two-track system with monetary barriers to entry and unequal appeal rights is antithetical to both the “appearance and the reality of due process and fundamental fairness,” 35 ILCS 1010/1-5(a).

*Third*, differential standards of review reduce uniformity in the tax law. Assume, for example, the following scenario: a case involving a mixed issue of law and fact is tried in the Tribunal, which decides the issue in favor of the Department. The taxpayer appeals, and the Appellate Court concludes that the Tribunal is wrong, but not so wrong that the determination was clearly erroneous. Under a rule of deference, the Appellate Court would affirm the Tribunal’s determination for the Department. Further assume that



a case presenting the same issue later reaches the same Appellate Court in an appeal from a refund action in circuit court. Now, review of the issue is *de novo* and the Appellate Court would be free to rule in favor of the taxpayer. In this manner, differential standards of review for appeals from the Tribunal and the circuit courts would reduce uniformity in tax decisions at the appellate level. This would, by extension, reduce uniformity in the treatment of similarly situated taxpayers, thereby diminishing “public confidence in the fairness of the State tax system,” 35 ILCS 1010/1-5(a).

For all of these reasons, the Tribunal’s decisions on questions of law (including on mixed questions of law and fact) must be reviewed in the same manner as circuit court decisions rendered on the exact same types of use tax disputes, *i.e.*, *de novo*.

## **II. Horsehead’s coke qualifies for the chemical exemption.**

Subject only to the requirement that it must first be heated to its reactive temperature, coke (solid carbon) naturally—and without any human or mechanical intervention or addition of other materials—oxidizes, turning from solid carbon to gaseous carbon monoxide that retains the original carbon component. A4; A22-A23. That carbon monoxide (oxidized coke) immediately reduces the zinc and iron oxides in the EAF Dust. A4; A23. These reactions proceed in a continuous and self-sustaining cycle until virtually all of the coke is consumed. The sole issue in dispute is whether Horsehead’s coke qualifies for exemption from the use tax as a chemical that effects a “direct and immediate” change, a phrase that is not defined in either the Use Tax Act or the regulations thereunder.

Short-circuiting the process of statutory interpretation, the Tribunal simply mashed together the Oxford Living Dictionary’s separate definitions of “direct” and

“immediate” in order to define a “direct and immediate change” as, in the Appellate Court’s words, “one that occurs at once without any intervening factors or intermediate steps.” A10; A25. Applying this definition, the Tribunal ruled, and the Appellate Court affirmed, that Horsehead’s coke does not “effect a direct and immediate change” upon the zinc and iron oxides in the EAF Dust because it first undergoes a chemical change (oxidation) as a natural result of being heated to its reactive state. A13; A26.

While consulting a dictionary may have been an appropriate place for the Tribunal and the Appellate Court to begin their analyses, it should not have been both the beginning and the end. Thorough statutory interpretation includes consideration of legal dictionary definitions in addition to the legislative policy and other courts’ interpretations of similar language. *See, e.g., Rosenbach v. Six Flags Entm’t Corp.*, 2019 IL 123186 (interpreting the statutory term “aggrieved” by considering whether a dictionary definition was consistent with the meaning given the term by other courts, the overall statutory structure, and the underlying legislative policy); *Corbett v. Cnty. of Lake*, 2017 IL 121536 (2017) (interpreting the statutory term “trails” by looking first to the dictionary definition, and then further analyzing whether that definition made sense in the context of the statute and its legislative purpose); *Scott v. Freeport Motor Cas.*, 379 Ill. 155, 162 (1942) (“In seeking the legislative intent, courts should consider the language used, the object to be attained, or the evil to be remedied, and this may involve more than the literal meaning of the words used.”).

Neither the Tribunal, nor the Appellate Court in affirming the Tribunal, engaged in the fulsome analysis necessary to arrive at a definition of “direct and immediate” that makes sense in the context of the chemical exemption. This resulted in the adoption of an

overly narrow interpretation that undermines the chemical exemption's statutory purpose and is inconsistent with every other persuasive authority that has been identified in this case.

This Court should correct the Tribunal's and the Appellate Court's unsound and incomplete analysis, and adopt a definition of "direct and immediate change" that puts sensible parameters around their unqualified prohibition on intervening factors and intermediate steps. More specifically, this Court should define a "direct and immediate change" as "one that occurs at once without any intervening factors or intermediate steps that disrupt the natural sequence of events or terminate the chemical's involvement."

Horsehead's definition is superior to the Tribunal's because it conforms to the full weight of authorities that Illinois courts consider and rely upon when interpreting statutes:

*First*, in contrast to the Tribunal's unnecessarily narrow definition, Horsehead's definition of a "direct and immediate" change accords with legal dictionaries' definitions of "direct" and "immediate" causation and is consistent with a normal understanding of the phrase.

*Second*, every persuasive authority interpreting this or similar statutory language that has been identified in this case takes a functional approach that encompasses changes that occur through a natural and continuous flow of operations. Neither the Department, the Tribunal, nor the Appellate Court has identified any authority, beyond one of two definitions in a single, general-purpose dictionary, that interprets the phrase "effect a direct and immediate change" to prohibit all intervening factors and intermediate steps.

*Third*, unlike the Tribunal's interpretation, Horsehead's definition harmonizes with the overall statutory structure and does not undermine the chemical exemption's purpose of encouraging manufacturing within the State by taking an unnecessarily narrow view relative to other states.

**A. Horsehead's interpretation is consistent with both the legal dictionary and common meanings of a "direct and immediate" change.**

Horsehead's definition of a "direct and immediate" change accords with legal dictionary definitions and a normal understanding of the phrase. The Tribunal's definition, on the other hand, accords with a single, general-purpose dictionary and is significantly narrower than a normal understanding of the phrase.

*First*, the Tribunal's definition of "direct and immediate" change prohibits all "intervening factors or intermediaries." This prohibition was drawn solely from the Oxford Living Dictionary's *second* listed definition of the word "direct," A25. Horsehead's definition qualifies this prohibition by allowing for intervening factors and intermediate steps that do not either disrupt the natural sequence of events or terminate the chemical's involvement.

This narrow qualification is consistent with the Oxford Living Dictionary's *first* listed definition, which defines "direct" as "[e]xtending or moving from one place to another without changing direction or stopping." *Direct*, Oxford Living Dictionary, <https://en.oxforddictionaries.com/definition/direct> (last visited Mar. 3, 2019). This is a broader construction than in the second listed definition, and it allows for changes to occur through a natural, unbroken sequence of events. Neither the Tribunal nor the Appellate Court provides any justification for rejecting this first Oxford definition in favor of the second.

Horsehead's definition also is consistent with the definitions of "direct" and "immediate" causation in respected *legal* dictionaries—sources Illinois higher courts view as a superior source of insight into the meaning of *statutory* language.

Black's Law Dictionary defines the "direct cause" of an event as its "proximate cause." *Direct Cause*, BLACK'S LAW DICTIONARY (10th Ed. 2014). The direct cause or proximate cause of an event is further defined as that which "directly produces an event and without which the event would not have occurred." *Id.* at *Proximate Cause*. Garner's Dictionary of Legal Usage adds more color to this definition. It defines a direct or proximate cause as one "which in natural and continuous sequence, unbroken by any new independent cause, produces an event, and without which the [event] would not have occurred." *Proximate Cause*, Bryan A. Garner, GARNER'S DICTIONARY OF LEGAL USAGE (3rd Ed. 2011). These same sources define "immediate" as "occurring without delay; instant" and "not separated by other persons or things," and an "immediate cause" as the last in a chain of events. BLACK'S LAW DICTIONARY (10th Ed. 2014) (defining "immediate" and "immediate cause"); GARNER'S DICTIONARY OF LEGAL USAGE (3rd Ed. 2011) (defining "immediate cause").

Horsehead's definition of a "direct and immediate" change incorporates the legal definition of a "direct" cause by encompassing changes that occur through a natural and continuous sequence of events. It also narrows that definition, and thus gives effect to the legal meaning of "immediate," by requiring that the chemical (whether in its original or

naturally modified form) remain an active and essential part of the reaction that changes the product being manufactured, *i.e.*, the last event in the natural sequence.<sup>6</sup>

Despite the fact that the chemical exemption uses the phrase “direct and immediate” to describe a causal relationship, the Tribunal does not make any reference to the legal meanings of “direct” and “immediate” causation. Nor does the Tribunal offer any justification for relying on its chosen Oxford Living Dictionary definition as its unitary source of meaning. This is despite the fact that Illinois higher courts **overwhelmingly** favor Black’s Law Dictionary and A Dictionary of Legal Usage as a source of statutory meaning. In cases involving an issue of statutory construction, this Court has consulted some version of the Oxford Dictionary only 3 times, but has consulted either Black’s Law Dictionary or A Dictionary of Legal Usage 236 times.<sup>7</sup> And, the Appellate Courts have consulted an Oxford Dictionary only 44 times in such cases, but have consulted either Black’s Law Dictionary or A Dictionary of Legal Usage 888 times.<sup>8</sup>

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<sup>6</sup> By referring to a change that occurs “at once,” Horsehead’s definition, like the Tribunal’s, also incorporates the temporal meaning of “immediate.” *See* A25. There is no dispute that Horsehead’s coke satisfies this temporal requirement. The Department, the Tribunal, and the Appellate Court all agree that a chemical “effect[s] a direct and immediate change” within the meaning of the chemical exemption even if the chemical must first be heated, a process that is never instantaneous. *See* discussion *infra* at Section II.B. (discussing the example of an aluminum oxide catalyst that qualifies for the chemical exemption even though it must first be superheated in order to effect any reaction at all). Thus, the fact that Horsehead’s coke must first be heated to its reactive state does not render its effect on the EAF Dust non-immediate.

<sup>7</sup> *Search of Westlaw*, Illinois Supreme Court Cases (last visited Feb. 28, 2019). *See* SA2 for the search history used to compile these numbers.

<sup>8</sup> *Search of Westlaw*, Illinois Appellate Court Cases (last visited Feb. 28, 2019). There were an additional 18 Appellate Court cases in which the court consulted both the

*Second*, the Tribunal's misplaced reliance on a single, general-purpose dictionary resulted in its adopting a definition of "direct and immediate" that is out-of-sync with a typical understanding of what it means to "effect a direct and immediate change." This Court has stressed that in interpreting a statute, the words should be given "a practical and common sense construction." *Freeport Motor Cas.*, 379 Ill. at 162; see *Blanchard v. Berrios*, 2016 IL 120315, ¶ 16 (in construing a constitutional provision, as in construing a statute, "the primary goal is to ascertain and give effect to the common understanding of the citizens who adopted it, and courts look first to the plain and generally understood meaning of the words used."). Only Horsehead's definition satisfies this requirement.

By incorporating an absolute bar on all intervening factors and intermediate steps, the Tribunal's interpretation of the chemical exemption excludes any number of ordinary, observable occurrences any reasonable person would regard as effecting a "direct and immediate" change. For example:

- It is undeniably true that simply placing a bullet next to a target does not change the target at all. In order for a bullet to fire from a revolver and strike its intended target, a number of activating forces and physical changes must first come into play. Among other things, the marksman has to pull the gun's trigger, which causes a firing pin to ignite a primer on the tip of the bullet casing. This ignites a propellant inside the casing, which releases a large volume of gas. The gas pressure drives the tip of the bullet out of the casing and down the gun's barrel, finally setting it on a course towards the target. See generally Tom Harris, *How Revolvers Work*, HOW STUFF WORKS, <https://science.howstuffworks.com/revolver2.htm> (last visited Jan. 11, 2018).
- When water is added to a steam iron and passed over a wrinkled garment, the natural and intended result is smooth, wrinkle-free fabric. But, in order for the water to smooth the fabric, it must first be subjected to an activating force (heat) and undergo an intermediate physical change (conversion to steam).

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Oxford dictionary and Black's Law Dictionary. See SA1-SA2 for the search history used to compile these numbers.

Like a bullet loaded into a gun and water added to a steam iron, coke (solid carbon) must first be subjected to an activating force (heat) and undergo a natural physical change (oxidation) before producing its intended effect. Just as the activating forces and physical changes in the above examples do not eliminate the bullet or the water, heating and oxidation do not eliminate the carbon. *See* A23 (finding that the carbon monoxide resulting from the heating and oxidation of coke is comprised of carbon from the coke and oxygen from the kiln air).

By excluding even those initial steps and changes that occur as part of a natural and continuous sequence of events, and which do not terminate the chemical's involvement, the Tribunal has adopted an overly narrow definition of "direct and immediate" that is inconsistent with the phrase's "practical and common sense" meaning. *Freeport Motor Cas.*, 379 Ill. at 162. This Court should reject the Tribunal's definition and adopt Horsehead's sensible approach, which accords with both the legal dictionary and commonsense meanings of the statutory language.

**B. The Tribunal's overly narrow interpretation is incompatible with every other persuasive authority that has been identified in this case.**

Neither the Department, the Tribunal, nor the Appellate Court has identified a single authority adopting an interpretation of "direct and immediate" that prohibits all intervening factors and intermediate steps. To the contrary, the Tribunal's definition that prohibits natural heating and oxidation is incompatible with an example in the Department's own regulations interpreting the chemical exemption. It also is inconsistent with this Court's guidance for interpreting the Use Tax Act and every other persuasive authority identified in this case. The Appellate Court erred by either disregarding or casually dismissing each of these points and authorities.



*First*, the Tribunal's definition cannot be squared with an example in the Department's regulations interpreting the chemical exemption. That example tells us that the act of bringing a chemical to its reactive state is not an intervening factor or intermediate step that takes a chemical outside the exemption's scope.

Ill. Adm. Code § 130.330(c)(6)(B) contains an example of a "chemical[]" acting as a catalyst" that qualifies for the chemical exemption. In that example, aluminum oxide is used as a catalyst in a "catalytic cracking process" to refine heavy gas oil (or, feedstock) by "cracking" it into smaller molecules. *Id.* Like coke placed next to zinc oxide, simply placing aluminum oxide next to feedstock does not produce any reaction whatsoever. Instead, the cracking process requires (i) heating the aluminum oxide catalyst to at least 500 degrees centigrade, (ii) injecting the heated catalyst into the heated feedstock, and (iii) pumping the mixture into the heated reaction chamber in which the actual cracking occurs.<sup>9</sup> The example concludes that the aluminum oxide catalyst effects a "direct and immediate change" upon the feedstock. *Id.*

Attempting to distinguish the aluminum oxide catalyst in this example from Horsehead's coke, the Appellate Court states that the Department's example "contemplates that the heated aluminum oxide causes the cracking of heavy gas oil, as opposed to the heated aluminum oxide causing an intermediate chemical change that in turn causes the cracking." A12. The Appellate Court maintains that Horsehead's use of

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<sup>9</sup> See generally Priv. Ltr. Rul. No. ST 95-0207 (May 22, 1995) (describing the cracking process and noting that it relies on heat); Vogt, E.T.C. & Weckhuysen, B.M., "Fluid catalytic cracking: recent developments on the grand old lady of zeolite catalysis," CHEMICAL SOCIETY REVIEWS (2015), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4594121/> (last visited Jan. 11, 2018) (describing the use of aluminum oxide and similar catalysts in the cracking process,

the coke is different because heat turns the coke (solid carbon) to gaseous carbon monoxide, which reacts with the zinc and iron oxides. *Id.* By treating what is in reality a natural and continuous cycle of reactions as several separate and independent steps, the Appellate Court draws an overly trivial distinction that overlooks coke's continued and continuous involvement.

The chemical (carbon) oxidizes as a natural consequence of being subjected to the exact same process (super-heating) as the aluminum oxide catalyst in the Department's example. And, even after undergoing that process, the carbon, like the aluminum catalyst, remains present in, and essential to, the reaction that directly and immediately changes the product being manufactured. Thus, like the aluminum oxide catalyst in the Department's example, coke qualifies for the chemical exemption.

Another everyday example, similar to those discussed above at Section II.A., aptly illustrates this point. There are two main ways to cook carrots using water: you can either boil the carrots or you can steam them. In each case, the water must first be heated to its boiling point. In the first method, the carrots are added directly to the boiling water, where they immediately begin to soften. In the second method (steaming), heat causes the water to convert to a gas (steam), and that gas comes into contact with the carrots and causes them to soften. Under the Appellate Court's reasoning, the water in the first method effects a direct and immediate change upon the carrots, but the water in the second method does not. This is because in the second method, heating the water causes it to undergo an intermediate change from a liquid to a gas that in turn softens the carrots.

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and stating that the process begins with injecting "hot catalyst" into "pre-heated feedstock").

This is an overly trivial and irrelevant distinction that doesn't make sense in the context of cooking carrots, and doesn't make sense here.

*Second*, the Tribunal's and the Appellate Court's arbitrary distinction between chemicals that react while in their original form and chemicals that first undergo a natural change is inconsistent with this Court's guidance for interpreting the Use Tax Act. *See Mobil Oil Corp. v. Johnson*, 93 Ill. 2d 126, 132-33 (1982) (holding that the use tax applies to purchased property that is chemically restructured before being used, and discussing three more of this Court's cases in accord with the decision).

For example, in *American Can Co. v. Department of Revenue*, this Court considered whether the use tax applied to raw materials (mainly metals) that the taxpayer purchased outside of Illinois and converted to machinery and replacement and repair parts for use at the taxpayer's manufacturing plants in Illinois. 47 Ill. 2d 531, 535-36 (1971). In determining that the use tax applied to the as-converted materials, this Court rejected the taxpayer's argument that in the process of being manufactured into machinery and repair and replacement parts, the raw materials lost their identity and thus were not subsequently used in Illinois. *Id.*

In *Mobil Oil*, this Court expanded its holding in *American Can* to purchased materials that were chemically (rather than physically) altered before use. The taxpayer in *Mobil Oil* purchased crude oil from out-of-state sellers and refined it into saleable products at a facility in Illinois. *Id.* at 129. During the refining process, the crude oil underwent certain chemical changes that resulted in its conversion into various "refinery fuels," including catalytic coke. *Id.* at 129-30. The taxpayer claimed that its subsequent use of the refinery fuels was not subject to the use tax because the taxpayer did not

purchase the refinery fuels; the taxpayer purchased crude oil. *Id.* at 131. This Court rejected this argument, stating that “[t]he substance purchased as crude oil contains the substance which in its restructured form constitutes catalytic coke, process gas and heavy oil, and it is entirely clear to us that the refinery fuels were purchased in the statutory sense when the crude oil was bought.” *Id.* at 132.

*American Can* and *Mobil Oil* each involved the inclusion of restructured materials within the use tax base. Although the opinions do not speak directly to whether the underlying principle should apply equally in the context of the Use Tax Act’s exemption provisions, there is nothing in their reasoning to suggest they should not. At the very least, the decisions highlight the arbitrary and outlier nature of the Tribunal’s and the Appellate Court’s distinction between coke in its purchased form (solid carbon) and coke in its restructured (oxidized) form.

*Third*, neither the Tribunal nor the Appellate Court identify a single authority beyond one of two definitions from the Oxford Living Dictionary that supports interpreting the phrase “effect a direct and immediate change” to prohibit all “intervening factors and intermediate steps.” In contrast, Horsehead has identified several persuasive authorities that have interpreted this and similar statutory language in a functional manner that encompasses changes that occur through a natural and continuous flow of operations. The following authorities are illustrative:

- *PPG Indus., Inc. v. Ill. Dep’t of Revenue*, No. 13 L 050140, at 3 (Ill. Cir. Ct. Sept. 9, 2014): In this case, an Illinois circuit court considered whether certain chemicals used in manufacturing glass qualified for the chemical exemption. Ruling in favor of the exemption, the court rejected the Department’s argument that a chemical effects a “direct and immediate change” only if it chemically reacts with the product being manufactured. *Id.* at 4. According to the court, a direct cause is one that “directly produces an effect; that which in natural and continuous sequence, unbroken by any new independent cause, produces an

event, and without which the [event] would not occur.” *Id.* at 5 (alteration in original) (quoting Bryan A. Garner, *DICTIONARY OF MODERN LEGAL USAGE* 104 (1987)).

- *Dep’t of Revenue v. XYZ Water Purifiers*, ST 99-11, at 12 (Ill. Dep’t of Revenue Office of Admin. Hearings, Aug. 19, 1999): In this decision from the Department’s Office of Administrative Hearings, the administrative law judge found that “[t]here is no question but that the [water] purification equipment effects a direct and immediate physical change upon the crude oil by ‘cracking’ it by means of steam derived from heated purified water.” *Id.* at 12. The administrative law judge thus determined that the water purification equipment qualified for the general MM&E exemption under regulatory language stating that the use of equipment to “effect a direct and immediate physical change” constitutes an exempt use. *Id.* at 11-12 (interpreting 86 Ill. Adm. Code 130.330(d)(3)(A)).
- Priv. Ltr. Rul. ST 11-0010 (Aug. 18, 2011) and Gen. Information Ltr. ST 09-0149-GIL (Nov. 9, 2009): In two separate pieces of informal taxpayer guidance, the Department concluded that blasting agents used in mining a rock quarry effect a “direct and immediate change” on the rocks. The facts indicate that the taxpayer mixed the blasting agents with an oxidizer and high explosives when loading them into the boreholes in the rocks, and then activated the explosion via a detonator.
- *Indiana Dep’t of State Revenue v. Cave Stone, Inc.*, 457 N.E.2d 520 (Ind. 1983): The use tax provision at issue exempted items “directly used by the purchaser in the direct production, manufacture, fabrication, assembly, extraction, mining, processing, refining or finishing of tangible personal property.” *Id.* at 523. The court found that the statute’s “double direct” standard requires the equipment at issue to have an “immediate effect” on the product. *Id.* at 525. The court found that trucks and other transportation devices used to haul stone to and from a crusher satisfied this standard because the transportation equipment “was essential to the achievement of a transformation of the crude stone into aggregate stone; it played an integral part in the ongoing process of transformation.” *Id.* at 524.

Each of these authorities rejects an interpretation of “direct and immediate” that myopically focuses on a single step in a natural and continuous sequence of events. Instead, they adopt a sensible approach that accords with both the legal dictionary definition of “direct” causation and a commonsense understanding of what it means to effect a “direct and immediate” change. They highlight both the reasonableness of

Horsehead's approach and the fact that the Tribunal's overly restrictive definition stands as an outlier.

The Tribunal and the Appellate Court should have considered and/or given more weight to these persuasive authorities, which are the type this Court considers when interpreting a statute for the first time. *E.g.*, *Rosenbach*, 2019 IL 123186 ¶¶30-32 (interpreting the statutory term "aggrieved" by looking to the dictionary definition as well as the meaning courts had given the term in other contexts); *Brown's Furniture, Inc. v. Wagner*, 171 Ill. 2d 410, 418 (1996) (interpreting the term "operating" as appears in the Use Tax Act; adopting the term's dictionary meaning, noting that it was in accord with an ordinary understanding of the term and the interpretation adopted by "sister states").

**C. Allowing the Appellate Court's ruling to stand will have a detrimental impact on Illinois manufacturers that the Legislature must not have intended.**

It is not enough for the Tribunal's interpretation of the chemical exemption to merely be consistent with a single, general-purpose dictionary's definitions of "direct" and "immediate." Rather, that definition must also be consistent with both the chemical exemption's overall statutory structure and its evident purpose. *See, e.g.*, *Cnty. of Lake*, 2017 IL 121536, ¶27 ("[T]he words and phrases in a statute must be construed in light of the statute as a whole, with each provision construed in connection with every other section.") (internal quotations and citations omitted); *Freeport Motor Cas.*, 379 Ill. at 162 ("The primary object in construing a statute, is to ascertain the legislative intent expressed therein. In seeking the legislative intent, courts should consider the language used, the object to be attained, or the evil to be remedied, and this may involve more than

the literal meaning of the words used.”) (citations omitted). Horsehead’s definition checks both of these boxes. The Tribunal’s does not.

*First*, the Tribunal’s overly narrow interpretation of the chemical exemption does not harmonize with the exemption’s overall statutory structure.

The chemical exemption is a subset of the MM&E exemption, which broadly exempts “equipment *used primarily* in the process of manufacturing or assembling tangible personal property [for sale],” 35 ILCS 105/3-5(18) (emphasis added). The MM&E exemption’s “used primarily” requirement has been broadly interpreted to include equipment that plays only a tangential role in the overall manufacturing process. *E.g., Zenith Elecs. Corp. v. Dep’t of Revenue*, 293 Ill. App. 3d 651, 657-59 (1st Dist. 1997) (ruling that MM&E exemption applied to plastic trays used to protect parts from breakage during transport between the factory where the parts were made and the factory where they would be inserted into the products being manufactured). For a *chemical* to qualify for the MM&E exemption, it must meet the further requirement of effecting a “direct and immediate” change upon the products being manufactured, 135 ILCS 105/3-50(4). Attaching the narrowest possible definition to this requirement, as the Tribunal did, is not consistent with the broad interpretation of the overall exemption.

Horsehead’s still narrow, but more sensibly so, definition of “direct and immediate” allows for the change to occur through a natural, unbroken sequence of events, but still requires the chemical’s active and essential involvement in the reaction that directly and immediately changes the product being manufactured. This is still a significantly higher bar for exemption than under the MM&E exemption’s “used primarily” requirement, but more consistent with the existing statutory interpretation.

Horsehead's definition thus appropriately harmonizes with the fact that the chemical exemption is a narrower subset of the broader MM&E exemption. The Tribunal's narrowest possible interpretation, on the other hand, goes much further than the statutory structure requires.

*Second*, the MM&E exemption, which encompasses the chemical exemption, is intended "to attract new manufacturing facilities to our State and to discourage existing ones from relocating outside Illinois." *Chi. Tribune Co. v. Johnson*, 106 Ill. 2d 63, 72 (1985). The Tribunal's overly restrictive interpretation will frustrate these legislative goals by increasing the already high tax burden on this State's manufacturing companies, thus further exacerbating the flow of such companies to neighboring states.

Manufacturing companies are a significant segment of this State's economy. The total economic output of Illinois manufacturers across all sectors was more than \$103.75 billion in 2017.<sup>10</sup> This represented 12.6% of the State's total output in that year. *Id.* While the Tribunal's overly narrow interpretation of the chemical exemption is likely to have a far-reaching, detrimental impact across all manufacturing sectors, its impact will certainly be felt by those that rely on metallurgical coke and other reducing agents in their manufacturing processes.

One such sector includes steel and iron manufacturers, which had a total economic output to the State of \$5.3 billion in 2017.<sup>11</sup> Steel and iron production generally

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<sup>10</sup> *Illinois Manufacturing Facts*, (Revised Oct. 2018), [https://www.nam.org/uploadedFiles/NAM/Site\\_Content/Data-and-Reports/State-Manufacturing-Data/State\\_Manufacturing\\_Data/January\\_2018\(1\)/Manufacturing-Facts---Illinois.pdf](https://www.nam.org/uploadedFiles/NAM/Site_Content/Data-and-Reports/State-Manufacturing-Data/State_Manufacturing_Data/January_2018(1)/Manufacturing-Facts---Illinois.pdf) (last visited Mar. 4, 2019).

<sup>11</sup> *The Steel Industry in Your State - Illinois*, (2018), <https://www.steel.org/economicimpact> (click on Illinois in interactive map and then select "View/Print") (last visited Mar. 4, 2019).



relies on coke's conversion to carbon monoxide within a blast furnace to reduce iron ore to metallic iron. See "How Steel is Made" (describing how, during the iron- and steel-making process, iron ore and coke are fed into a blast furnace at which point "[t]he air causes the coke to burn, producing carbon monoxide which reacts with the iron ore, as well as heat to melt the iron").<sup>12</sup> At least one large steel producer is already in the process of relocating from Illinois to neighboring Indiana, with the State's high taxes being identified as one "obvious reason" for the move. *E.g.*, "Bedford Park steel company moving to Gary" (discussing Alliance Steel Corp.'s imminent move from Cook County, Illinois to Gary, Indiana).<sup>13</sup> This is hardly an anomaly.

Illinois has lagged significantly behind neighboring states in manufacturing job growth since 2008, when the country began moving out of the recession. In fact, during the 10-year period ending December 31, 2018, Illinois lost over 40,000 manufacturing jobs.<sup>14</sup> During that same period, Indiana (48,200), Wisconsin (12,200), and Michigan

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<sup>12</sup> *How is Steel Produced?*, WORLD COAL ASSOCIATION, <https://www.worldcoal.org/coal/uses-coal/how-steel-produced> (last visited Mar. 4, 2019).

<sup>13</sup> Claire Bushey, *Bedford Park steel company moving to Gary*, CRAIN'S CHICAGO BUSINESS (Dec. 5, 2018), <https://www.chicagobusiness.com/manufacturing/bedford-park-steel-company-moving-gary>.

<sup>14</sup> SA9, SA12. BLS Data Finder, UNITED STATES DEPARTMENT OF LABOR, <https://beta.bls.gov/dataQuery/find?st=0&r=20&s=popularity%3AD&fq=survey:%5b%5d&fq=mg:%5bMeasure+Category%5d&fq=mc:%5bEmployed%5d&fq=cg:%5bGeography%5d&fq=cc:%5bStates+and+Territories%5d&fq=ccd:%5bIllinois%5d&fq=cg:%5bIndustry%5d&fq=cc:%5bManufacturing%5d&more=0> (select "Employed and Office of Employment and Unemployment Statistics: Manufacturing-Manufacturing" for Illinois, Indiana, Wisconsin, and Michigan, in turn, and then select "View Data" to proceed to the download page.).

(94,200) all saw an increase in the number of manufacturing jobs in their states.<sup>15</sup> Articles blaming this trend on the State's high taxes are legion.

For example, a recent article in U.S. News & World Report discusses how the tax climate and budgetary woes are causing businesses to move outside the State in droves, leaving Illinois with the dubious distinction of being number one in outbound moves. "Illinois Loses Out as Companies Move Out."<sup>16</sup> The article highlights two manufacturing companies—Hoist Lifttruck Manufacturing and Food Warming Equipment Co.—that have left Illinois in recent years after growing frustrated with the State's high taxes. *Id.* See also, "Suburban steel company border-jumps to Indiana"<sup>17</sup> (discussing the relocation of T&B Tube, a steel tube manufacturer, from Illinois to Indiana, with the company's president mentioning Indiana's lower taxes as one of the draws). Similarly, a 2017 editorial in the Chicago Tribune identified the State's costly tax burden as one reason manufacturing workers in Illinois are "being pummeled."<sup>18</sup>

The Tribunal's interpretation of the chemical exemption will only exacerbate this trend, furthering the loss of manufacturing jobs in an already struggling State. This is particularly true given that neighboring Indiana, which is already a popular destination

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<sup>15</sup> SA13, SA16 (Indiana); SA17, SA20 (Wisconsin); SA21, SA24 (Michigan).

<sup>16</sup> Anna Marie Kukec, *Illinois Loses Out as Companies Move Out*, U.S. NEWS & WORLD REPORT (Mar. 15, 2018), <https://www.usnews.com/news/best-states/articles/2018-03-15/companies-want-out-of-illinois>.

<sup>17</sup> Micah Maidenber, *Suburban steel company border-jumps to Indiana*, CRAIN'S CHICAGO BUSINESS (Apr. 1, 2015), <https://www.chicagobusiness.com/article/20150401/NEWS05/150409980/steel-company-t-b-tube-is-moving-from-south-holland-to-gary-indiana>.

<sup>18</sup> Austin Berg, *Illinois' employment drought and the oases next door*, CHICAGO TRIBUNE (Apr. 6, 2017), <http://www.chicagotribune.com/suburbs/daily-southtown/opinion/ct-sta-berg-column-st-0407-20170406-story.html>.

for Illinois companies seeking to lower tax and other costs, takes a much more sensible approach with respect to its comparable exemption. *See, e.g., Cave Stone, Inc.*, 457 N.E.2d at 524-25 (interpreting a prior version of a use tax exemption for equipment acquired “for direct use in the direct production” of tangible personal property to require the equipment to have an “immediate effect” on the property, and then finding that transportation equipment used to move rock from a quarry to crushers was exempt).

The Tribunal erred by not considering this crucial component of statutory interpretation. *Freeport Motor Cas.*, 379 Ill. at 162. Instead, the Tribunal simply sidestepped the issue by suggesting that Horsehead’s approach would “turn[] the chemical exemption statute on its head” by expanding it to “any chemical which is used for any reason at any time during a manufacturing process,” A26. This is simply not true. Horsehead’s definition of a “direct and immediate” change requires the chemical (whether in its original or naturally modified state) to be an active and essential part of the specific reaction that directly and immediately changes the product being manufactured. This is a sensibly narrow construction that conforms to the full weight of authorities Illinois courts consider and rely upon when interpreting statutory language.

Left to stand, the Appellate Court’s decision adopting the Tribunal’s unnecessarily narrow and unsupported interpretation of the chemical exemption will frustrate the statute’s purpose of “attract[ing] new manufacturing facilities to our State and [discouraging] existing ones from relocating outside Illinois.” *Chi. Tribune*, 106 Ill. 2d at 72. Therefore, this Court should reverse it.

**III. Penalties should be abated because Horsehead's position was, *at the very least*, reasonable.**

During the periods at issue, Horsehead—a taxpayer with a demonstrated history of compliance with its tax obligations, A32—believed its coke purchases qualified for exemption from the use tax as a chemical that “effect[s] a direct and immediate change” upon a product being manufactured for sale. 35 ILCS 105/3-5(18). This belief was consistent with both the legal dictionary meaning and an ordinary understanding of the phrase “effect a direct and immediate change.” *See supra* pp. 21-25. And it was consistent with every persuasive authority interpreting this and similar statutory language. *See supra* pp. 25-31. Thus, Horsehead's position was not surprising.

What is surprising is that the Tribunal and the Appellate Court not only ruled that Horsehead's position was wrong, but they also ruled that Horsehead's position was *so clearly wrong* that it did not satisfy the “reasonable cause” exception for penalty abatement. A17, A32-A33. Their rulings on this issue were based on fundamentally flawed analyses and should not be allowed to stand. Assuming *arguendo* that Horsehead's coke does not qualify for the chemical exemption, its position was at the very least reasonable. Penalties must therefore be abated.

The Uniform Penalty and Interest Act states that late-filing and late-payment penalties “shall not apply” when a taxpayer demonstrates that it had “reasonable cause” for its position. 35 ILCS 735/3-8. In determining whether a taxpayer had reasonable cause, the Department's regulations provide that the “most important factor” is the extent to which the taxpayer made a “good faith effort” to comply with its tax obligations, as evidenced by the taxpayer's exercise of “ordinary business care and prudence.” 86 Ill. Adm. Code 700.400(b), (c). Whether a taxpayer exercised “ordinary business care and

prudence” is based on “the clarity of the law or its interpretation and the taxpayer’s experience, knowledge, and education.” *Id.* at 700.400(c).

These regulations make two things clear: (1) in order to satisfy the reasonable cause exception, the taxpayer must demonstrate the reasonableness of what has proven to be an erroneous position, and (2) that showing looks backwards to the time period at issue, including the clarity of the law and how that clarity (or lack thereof) might have impacted *the taxpayer’s* decision-making. *See id.* at 700.400(b), (c); *see also Shared Imaging, LLC v. Hamer*, 2017 IL App (1st) 152817, ¶¶ 38, 40, 76 (abating penalties because the taxpayer’s position was not “unreasonable”; finding that, in the absence of guiding case law, the taxpayer “could have” concluded an exemption applied). If a taxpayer makes this showing, the statute says that penalties **must** be abated. 35 ILCS 735/3-8.

Whether reasonable cause exists is a factual determination reviewed under the “manifest weight of the evidence” standard. *Hollinger Int’l, Inc. v. Bower*, 363 Ill. App. 3d 313, 315 (1st Dist. 2005). Embedded within that factual determination, however, is an objective determination regarding the clarity of the law during the period at issue. The chemical exemption’s clarity during the period at issue is a legal inquiry that this Court should review *de novo*. *See id.* at 327-28 (implying that clarity of the law is a legal inquiry); *Cf. Ill. Landowners All. v. Ill. Commerce Comm’n*, 2017 IL 121302, ¶ 45 (specifying *de novo* review for questions of law).

**A. The Tribunal’s and the Appellate Court’s analyses fundamentally distort the penalty abatement process.**

In ruling that Horsehead did not make a “good faith effort” to comply with its tax obligations, the Tribunal and the Appellate Court relied solely on their own matter-of-

first impression interpretation of the law, and their determination that Horsehead's position was wrong. A14-A16; A32-A33. According to the Appellate Court, "[t]he language of the chemical exemption was clear, and Horsehead cannot rely on its own erroneous interpretation of the statute to argue that it exercised ordinary business care and prudence in failing to file and pay the use tax." A16. The Tribunal's and the Appellate Court's failure to consider how the absence of guiding authority might have impacted *Horsehead's* decision-making, coupled with their outright hostility to a taxpayer attempting to show its position was reasonable, fundamentally distort the penalty abatement process. Their decisions set bad precedent and should not be allowed to stand.

*First*, taken at face value, the Appellate Court's admonition that Horsehead cannot rely on its own "erroneous interpretation" of the Use Tax Act short-circuited the entire penalty abatement process and doomed Horsehead from the outset. A taxpayer left to argue over penalties has necessarily taken an "erroneous" tax position. And, where that position relates to a statute that has not previously been interpreted by any precedential authority, the taxpayer often will have nothing to point to *but* the reasonableness of its own, ultimately erroneous, reading of the statutory language. The explicit purpose of the "reasonable cause" regulations is to provide relief to a taxpayer who erred, albeit reasonably. *See* 86 Ill. Adm. Code 700.400. The Appellate Court's approach precludes that result.

*Second*, in evaluating the clarity of the law, neither the Tribunal nor the Appellate Court considered how a taxpayer exercising ordinary business care and prudence would have interpreted the exemption. Critically, they did not consider how the absence of statutory and regulatory definitions and guiding case law would have impacted that

interpretation. A15-A16; A32-A33. Instead, both the Tribunal and the Appellate Court simply assumed that a taxpayer would have come to the same conclusion they did. *Id.* This is contrary to how other courts have approached the reasonable cause exemption's clarity-of-the-law prong. *Cf. Shared Imaging*, 2017 IL App (1st) 152817, ¶ 76 (taking into account the "absence of guiding case law" in abating penalties under the Use Tax Act); *Hollinger Int'l*, 363 Ill. App. 3d at 323-24 (looking to judicial interpretations other than just its own in declining to abate penalties).

By failing to consider the reasonableness of Horsehead's position in light of the law as it then stood, the Tribunal and the Appellate Court made mistakes of law that go to the heart of the penalty abatement analysis.

**B. Horsehead satisfies the "reasonable cause" exception because its position was, at the very least, reasonable in light of the clarity of the law as it then stood.**

The absence of guiding case law and relevant statutory and regulatory definitions means the chemical exemption was, at best, unclear. In the absence of any authority to the contrary, Horsehead reasonably relied on a normal understanding of what it means to "effect and direct and immediate change." Horsehead's understanding of the chemical exemption is consistent with both the phrase's legal definition and the only persuasive authorities interpreting similar terms. It is, at the very least, reasonable. On these facts, the Department never should have imposed penalties, and the Tribunal and the Appellate Court never should have upheld them.

*First*, numerous, persuasive authorities have given the phrase "direct and immediate" a meaning that would easily accommodate the changes effected by Horsehead's coke. *See supra* pp. 29-30 (collecting and describing several of these

authorities). This includes the interpretations of both a circuit court judge and an administrative law judge with the Department's Office of Administrative Hearings. *See supra* pp. 29-30, discussing the rulings in *PPG Indus., Inc. v. Ill. Dep't of Rev.*, No. 13 L 050140, at 3-5 (Ill. Cir. Ct. Sept. 9, 2014) and *Dep't of Revenue v. XYZ Water Purifiers*, ST 99-11, at 12 (Ill. Dep't of Revenue Office of Admin. Hearings, Aug. 19, 1999). It borders on the absurd to treat Horsehead's understanding of the chemical exemption as unreasonable when it is in accord with the only persuasive authorities interpreting similar terms.

*Second*, the single touchpoint the Tribunal used to adopt its supposedly "clear," matter-of-first impression definition of a "direct and immediate" change was the Oxford Living Dictionary. A25. However, other dictionaries, including respected legal dictionaries, and a second definition within that same dictionary, offer alternate definitions that allow for changes to occur through a natural and continuous sequence of events, and which would easily encompass the changes effected by Horsehead's coke, *see supra* pp. 21-23. The Tribunal does not offer any justification for its reliance on one definition from the Oxford Living Dictionary—or for its implied assumption that a taxpayer exercising ordinary business care and prudence would have consulted that specific non-legal dictionary definition. Thus, it was simply unreasonable for the Tribunal to conclude that that singular source renders the meaning of the chemical exemption "clear." A25.

*Third*, because the statutory language was not clearly defined, it was both reasonable and appropriate for Horsehead to rely on a normal understanding of the statutory language in deciding whether to claim the chemical exemption. *See Shared*



*Imaging*, 2017 IL App (1st) 152817, ¶¶ 38, 40, 76 (abating penalties where there was no guiding case law and taxpayer's interpretation of the statute was not unreasonable based on "typical[] understand[ing]" of operative language). Subject only to the requirement that it must first be heated to its reactive temperature, coke (solid carbon) naturally turns from solid carbon to gaseous carbon monoxide that retains the original carbon component. A4; A22-A23. That carbon monoxide immediately reduces the zinc and iron oxides in the EAF Dust. A4; A23. Based on a typical understanding of what it means to effect a direct and immediate change, a taxpayer exercising ordinary business care and prudence would have reasonably concluded that Horsehead's coke qualifies for the chemical exemption. *See supra* pp. 24-25.

A reasonable interpretation of the statutory language, coupled with an absence of contrary authority, is in and of itself sufficient to demonstrate reasonable cause for the abatement of penalties. Indeed, penalties have been abated for far less. *See Shared Imaging*, 2017 IL App (1st) 152817, ¶¶ 38, 40, 76 (abating penalties where there was no guiding case law and taxpayer's interpretation of the statute was not unreasonable, notwithstanding the existence of a statutory definition of the operative language and a factually comparable Department regulation, in each case contrary to the taxpayer's position).

The Appellate Court's suggestion that Horsehead was also required to either demonstrate that it sought "professional advice" or present evidence of "other reliance" is inconsistent with the regulations, which do not contain any such requirement. *See* 35 ILCS 735/3-8; 86 Ill. Adm. Code § 700.400(b), (c). It also is contrary to how the Appellate Court has itself applied the reasonable cause exception. *Shared Imaging*, 2017

IL App (1st) 152817, ¶ 76 (abating penalties because the taxpayer's position was not "unreasonable," and without requiring any evidence of reliance on expert advice or supportive authorities).

In sum, the Tribunal's determination regarding the clarity of the chemical exemption was wrong as a matter of law, and its determination that Horsehead did not have "reasonable cause" for its position was against the manifest weight of the evidence. Accordingly, *even if* this Court finds that Horsehead's coke did not qualify for the chemical exemption, this Court should reverse the Appellate Court's ruling on the issue of penalties.

### CONCLUSION

Granting deference to the Tribunal's legal conclusions will raise significant concerns of procedural fairness and uniformity, thereby hindering the Tribunal's ability to fulfill its statutory purpose of "increas[ing] public confidence in the fairness of the state tax system."

Properly reviewing the interpretation of the chemical exemption *de novo*, it is clear that Horsehead's coke "effects a direct and immediate change" upon the products being manufactured. This position accords with both the legal dictionary and normal meanings of the phrase, the overall statutory structure, the approach taken by precedential authorities interpreting this and similar statutory language, and this Court's guidance for interpreting the Use Tax Act. Left to stand, the Appellate Court's contrary decision sets bad precedent and will undermine the chemical exemption's statutory intent.

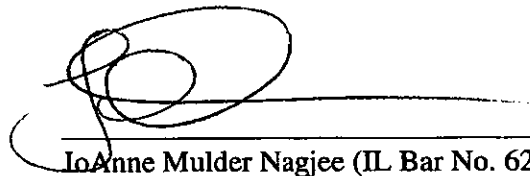
*Even if* this Court determines that Horsehead's coke did not qualify for the chemical exemption, penalties should be abated because Horsehead's position was, at the very least, based on a reasonable interpretation of the plain statutory language. The

Tribunal and the Appellate Court erred as a matter of law in determining that the Tribunal's contrary, matter-of-first impression interpretation—derived solely from a single, general purpose dictionary—rendered the meaning of the statutory terms “clear.”

Accordingly, this Court should reverse the Appellate Court's Order, vacate the Department's Notices of Tax Liability in their entirety, and enter a judgment that Horsehead's coke purchases qualify for exemption from the use tax under 35 ILCS 105/3-5(18).

Dated: March 7, 2019

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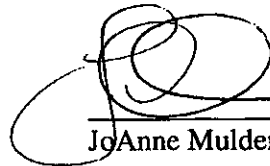


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**CERTIFICATE OF COMPLIANCE**

I certify that this brief conforms to the requirements of Rules 341(a) and (b). The length of this brief, excluding the pages or words contained in the Rule 341(d) cover, the Rule 341(h)(1) statement of points and authorities, the Rule 341(c) certificate of compliance, the certificate of service, and those matters to be appended to the brief under Rule 342(a), is 44 pages.

  
JoAnne Mulder Nagjee (No. 6298588)

**CERTIFICATE OF SERVICE**

I, JoAnne Mulder Nagjee, an attorney, certify under penalty of law as provided in 735 ILCS 5/1-109 (2014), that on March 7, 2019, I caused the **BRIEF OF APPELLANT-PETITIONER HORSEHEAD CORPORATION** to be filed with the Supreme Court of Illinois through its e-filing system and served upon the following via electronic mail:

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Under penalties as provided by law pursuant to Section 1-109 of the Code of Civil Procedure, I certify that the statements set forth in this instrument are true and correct.

  
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2018 IL App (1st) 172802

FIRST DIVISION  
September 24, 2018

No. 1-17-2802

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IN THE  
APPELLATE COURT OF ILLINOIS  
FIRST DISTRICT

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HORSEHEAD CORPORATION,	)	
	)	
Petitioner,	)	Petition for Administrative
	)	Review of the Illinois
v.	)	Independent Tax Tribunal
	)	
THE DEPARTMENT OF REVENUE and THE	)	No. 14-TT-227
ILLINOIS INDEPENDENT TAX TRIBUNAL,	)	
	)	
Respondents.	)	

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JUSTICE PIERCE delivered the judgment of the court, with opinion.  
Presiding Justice Mikva and Justice Walker concurred in the judgment and opinion.

**OPINION**

¶ 1 Respondent Illinois Department of Revenue (IDOR) issued petitioner Horsehead Corporation<sup>1</sup> two notices of tax liability for Horsehead's failure to pay use taxes on its purchases of metallurgical coke between January 2007 and June 2011. Horsehead filed a petition for review with the Illinois Independent Tax Tribunal (tax tribunal), which affirmed the notices of tax liability as well as the imposition of the use tax, interest, late filing penalties, and late payment penalties totaling approximately \$1,521,041. Horsehead timely filed a petition for review in this court. For the following reasons, we affirm the tax tribunal's final decision.

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<sup>1</sup>Horsehead Corporation is now known as American Zinc Recycling Corporation. We will, however, refer to petitioner as "Horsehead."

**A-001**

No. 1-17-2802

¶ 2

## BACKGROUND

¶ 3 Illinois imposes a use tax “upon the privilege of using in this State tangible personal property purchased at retail from a retailer.” 35 ILCS 105/3 (West 2016). Relevant to the issues in this appeal, section 3-5(18) of the Use Tax Act contains an exemption from the use tax for the following manufacturing and assembling machinery and equipment:

“Manufacturing and assembling machinery and equipment used primarily in the process of manufacturing or assembling tangible personal property for wholesale or retail sale or lease, whether that sale or lease is made directly by the manufacturer or by some other person, whether the materials used in the process are owned by the manufacturer or some other person, or whether that sale or lease is made apart from or as an incident to the seller’s engaging in the service occupation of producing machines, tools, dies, jigs, patterns, gauges, or other similar items of no commercial value on special order for a particular purchaser.”

*Id.* § 3-5(18).

¶ 4 Section 3-50 of the Use Tax Act contains a definition of “equipment” that includes certain “chemicals and chemicals acting as catalysts”:

“§ 3-50. Manufacturing and assembly exemption. The manufacturing and assembling machinery and equipment exemption includes machinery and equipment that replaces machinery and equipment in an existing manufacturing facility as well as machinery and equipment that are for use in an expanded or new manufacturing facility. \*\*\* For the purposes of this exemption, terms have the following meanings:

\* \* \*



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(4) 'Equipment' includes an independent device or tool separate from machinery but essential to an integrated manufacturing or assembly process \*\*\*. \*\*\* *Equipment includes chemicals or chemicals acting as catalysts but only if the chemicals or chemicals acting as catalysts effect a direct and immediate change upon a product being manufactured or assembled for wholesale or retail sale or lease.*" (Emphasis added.) *Id.* § 3-50(4).

¶ 5 Horsehead recycles electric arc furnace dust (EAF Dust) generated by steel producers. EAF Dust contains zinc oxide, iron oxide, and other impurities that may include chlorides, lead, and cadmium. Horsehead reclaims zinc and metallic oxides from EAF Dust through a recycling process that strips impurities from the zinc oxide to extract pure zinc, which is collected in powder form and sold directly to third parties. The remaining EAF Dust is heated to a higher temperature to separate impurities from the iron oxide to produce iron-rich material, which is sold to third parties for their own manufacturing processes.

¶ 6 Horsehead operates a recycling facility in Calumet City, Illinois. It employs a "Waelzing process," using a rotary Waelz kiln—a long, rotating, cylindrical oven situated at a slight angle—to "reduce" and recover the zinc as crude zinc oxide from EAF Dust. Horsehead purchases metallurgical coke—a solid material consisting almost entirely of carbon—for use in the Waelzing process. Horsehead combines EAF Dust with metallurgical coke "breeze" (*i.e.*, metallurgical coke in fine dust form) and water to create pellets. The pellets are then fed into one end of the kiln, and oxygen from the outside air is drawn into the kiln from the opposite side. The air inside the kiln is heated by external gas burners to between 600 and 700 degrees centigrade to dry the pellets. At this temperature, a chemical reaction starts to occur.

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¶ 7 When the pellets reach the desired temperature, the metallurgical coke reacts with the carbon dioxide, creating carbon monoxide.<sup>2</sup> As the carbon monoxide seeps into the heated pellets on the kiln bed, the carbon monoxide acts as a reducing agent to strip away oxygen from the zinc oxide and iron oxide in the EAF Dust, resulting in metallic zinc vapor and metallic iron. The process results in additional carbon dioxide, which then reacts with the heated pellets to produce additional carbon monoxide, which then seeps into the heated pellets on the kiln bed, stripping away more oxygen from the zinc oxide and iron oxide in the EAF Dust, resulting in a continuous, self-sustaining cycle of reactions. The metallic zinc vapor rises from the kiln bed and reacts with oxygen inside the kiln, producing fine particles of crude zinc oxide. The metallic iron also reacts with the oxygen inside the kiln, producing iron oxide rich material. These reoxidation processes generate heat within the kiln, making the Waelzing process self-sustaining.

¶ 8 After the Waelzing process is completed, Horsehead either sells the crude zinc oxide directly to third parties (as "Waelz oxide") or sends it to another Horsehead facility for further refining, where it is then sold to third parties. The iron oxide rich material is also sold to third parties. Virtually all of the metallurgical coke is consumed during the Waelzing process.

¶ 9 On October 3, 2014, IDOR issued Horsehead two "Notices of Tax Liability" for the period of January 1, 2007, through June 30, 2011.<sup>3</sup> IDOR's notices informed Horsehead that it was liable for approximately \$1,521,041 in use taxes, interest, late payment penalties, and late filing penalties under the Use Tax Act (35 ILCS 105/1 *et seq.* (West 2012)) for Horsehead's out-of-state purchases of metallurgical coke used in the Waelzing processes, for which it had not paid any use tax. Horsehead filed a petition for hearing with the tax tribunal, contending that the

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<sup>2</sup>Expressed as a chemical formula,  $C+CO_2=2CO$ . In other words, the reaction between carbon and the carbon dioxide in an oxygen-poor environment such as the kiln produces carbon monoxide.

<sup>3</sup>The first notice covered the period of January 1, 2007, through June 30, 2009, and the second notice covered the period of July 1, 2009, through June 30, 2011.

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purchases of metallurgical coke were exempt from the use tax under section 3-50(4) of the Use Tax Act because the metallurgical coke, as part of the Waelzing processes, met the definition of a chemical or a chemical acting as a catalyst to effect a direct and immediate change upon the zinc and iron in the EAF Dust. IDOR answered the petition, and the parties engaged in discovery. The tax tribunal conducted a hearing, where it heard testimony from numerous witnesses, and considered posthearing briefs from the parties.

¶ 10 The tax tribunal considered the plain meaning of the terms “direct” and “immediate,” as used in section 3-50(4) of the Use Tax Act, and found those terms to be clear and unambiguous. The tax tribunal also considered IDOR’s administrative regulations in section 130.330(c)(6) of Title 86 of the Illinois Administrative Code (Title 86) (86 Ill. Adm. Code 130.330(c)(6) (2016)), which provides two examples of reactions that are direct and immediate. The tax tribunal’s written decision concluded that the carbon monoxide acts as the reducing agent and causes a direct and immediate change on the zinc oxide and iron oxide, the product being sold by Horsehead. The tax tribunal concluded that in the Waelzing process, metallurgical coke does not directly and immediately cause a change to the zinc and iron in the EAF Dust because “[s]imply placing [metallurgical] coke next to zinc oxide or zinc does not create any chemical reaction whatsoever, a point conceded by Horsehead’s own witnesses.” The tax tribunal found that Horsehead was attempting to condense all of the separate chemical reactions in the Waelzing process into a continuous and single chemical reaction and that Horsehead’s position “renders the language ‘direct and immediate’ void.” The tax tribunal observed that it was the carbon monoxide—not the carbon in the metallurgical coke alone—that reacts with the zinc oxide and iron oxide. The tax tribunal further observed that none of Horsehead’s witnesses were asked to define the term “catalyst” or testified that the metallurgical coke acted as a catalyst. Therefore,

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the tax tribunal concluded that Horsehead's out-of-state purchases of metallurgical coke did not qualify for the exemption set forth in section 3-50(4) of the Use Tax Act and that Horsehead was liable for the tax.

¶ 11 Before the tax tribunal, Horsehead argued that, if it were liable for the use tax, it should not have to pay the late filing and late payment penalties. Horsehead did not challenge the amount of the penalties, but instead argued that the penalties should be abated under section 700.400 of Title 86 (86 Ill. Adm. Code 700.400(b), (c) (2001)). It contended that section 3-50(4) of the Use Tax Act lacks a specific definition of the term "direct and immediate change" and that it had a history of complying with its other state tax obligations. The tax tribunal agreed that Horsehead had shown compliance with its other tax obligations but observed that Horsehead failed to present any evidence of good faith with respect to the position it took toward the chemical exemption. Thus, there was no evidence as to "what or who [Horsehead] relied upon in choosing to claim its [metallurgical] coke purchases as catalysts when it chose not to pay the use tax in question, other than [Horsehead's] claim that the term 'direct and immediate' is undefined, leaving the chemical exemption statute unclear." The tax tribunal upheld IDOR's imposition of late filing penalties and late payment penalties under section 12 of Use Tax Act (35 ILCS 105/12 (West 2016)), which incorporates portions of the Uniform Penalty and Interest Act (35 ILCS 735/3-1 *et seq.* (West 2016)).

¶ 12 Horsehead timely filed a petition for review in this court from the tax tribunal's final decision. 35 ILCS 1010/1-75 (West 2016); 735 ILCS 5/3-113 (West 2016); Ill. S. Ct. R. 335 (eff. July 1, 2017).

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¶ 13

# ANALYSIS

¶ 14 On appeal, Horsehead raises the same two principal arguments that it advanced before the tax tribunal. First, it argues that its purchases of metallurgical coke were exempt under section 3-50(4) of the Use Tax Act because the metallurgical coke effects a direct and immediate change on the zinc oxide and iron oxide sold by Horsehead and that the tax tribunal's decision elevates form over substance. Second, Horsehead argues that, even if it is liable for the use tax, it had reasonable cause to take the position that these purchases were exempt and the tax tribunal's decision to uphold the late payment and late filing penalties was against the manifest weight of the evidence.

¶ 15 The parties disagree on the appropriate standard of review for Horsehead's challenge to the tax tribunal's order finding that the chemical exemption does not apply. Horsehead contends that there are no factual challenges at issue and therefore the tax tribunal's determination of whether the exemption applies is a question of law reviewed *de novo*. See *Zenith Electronics Corp. v. Department of Revenue*, 293 Ill. App. 3d 651, 654 (1997) ("Where no factual dispute exists, and the question raised on review is purely legal, such as statutory construction, our review is *de novo*"). IDOR argues that the clearly erroneous standard applies because the historical facts are not in dispute, and the question is whether those facts meet a statutory definition. See *Goodman v. Ward*, 241 Ill. 2d 398, 406 (2011). We agree with IDOR that the clearly erroneous standard applies, as this case involves a mixed question of law and fact. See *AFM Messenger Service, Inc. v. Department of Employment Security*, 198 Ill. 2d 380, 391 (2001) (stating that a mixed question of law and fact is one involving an examination of the legal effect of a given set of facts). An administrative agency's decision "will be deemed 'clearly erroneous' only where the reviewing court, on the entire record, is 'left with the definite and firm conviction

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that a mistake has been committed.’ ” *Id.* at 395 (quoting *United States v. United States Gypsum Co.*, 333 U.S. 364, 395 (1948)).

¶ 16 Horsehead insists, however, that the tax tribunal’s decision should be afforded no deference at all because it “is not charged with either enforcing the Use Tax Act or promulgating the regulations thereunder, but rather is an independent State agency charged with resolving disputes between taxpayers and [IDOR].” Horsehead relies on *Salt Creek Rural Park District v. Department of Revenue*, 334 Ill. App. 3d 67, 70-71 (2002), for the proposition that the *de novo* standard applies where an administrative agency’s decision does not implicate that agency’s unique expertise. We disagree with Horsehead’s conclusion. In enacting the Illinois Independent Tax Tribunal Act of 2012, the legislature declared the purpose of the tax tribunal:

“To increase public confidence in the fairness of the State tax system, the State shall provide an independent administrative tribunal *with tax expertise* to resolve tax disputes between the Department of Revenue and taxpayers prior to requiring the taxpayer to pay the amounts in issue. By establishing an independent tax tribunal, this Act provides taxpayers with a means of resolving controversies that ensures both the appearance and the reality of due process and fundamental fairness.” (Emphasis added.) 35 ILCS 1010/1-5(a) (West 2016).

The statutory language reflects an express legislative mandate that the tax tribunal possess and employ tax expertise in resolving tax disputes. Horsehead offers no argument that the tax tribunal in this case did not possess the requisite tax expertise to interpret the Use Tax Act or that it failed to meaningfully employ that expertise when determining whether Horsehead’s out-of-state metallurgical coke purchases qualify for an exemption under Use Tax Act. That stated, our supreme court “has frequently acknowledged the wisdom of judicial deference to an agency’s

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experience and expertise.” *AFM Messenger*, 198 Ill. 2d at 394-95 (collecting cases). We therefore reject Horsehead’s contention that the tax tribunal lacks expertise in interpreting the Use Tax Act such that we must apply a *de novo* standard of review. This does not mean, however, that we must blindly defer to the tax tribunal’s decision. *Id.* at 395.

¶ 17 We now turn to Horsehead’s arguments and the tax tribunal’s decision. Horsehead’s first argument on appeal is that its purchases of metallurgical coke were exempt under section 3-50(4) of the Use Tax Act because, in its recycling process, metallurgical coke effects a direct and immediate change on the zinc oxide and iron oxide. Horsehead attempts to frame the issue on appeal as “whether the [metallurgical] coke is somehow ineligible for the chemical exemption because in order to effect [a] direct and immediate change[ ], the [metallurgical] coke must first be heated to its reactive temperature.” We observe, however, that the tax tribunal did not find the process of heating metallurgical coke to be a determinative factor in assessing whether the chemical exemption applied but, instead, considered whether it was the metallurgical coke or the carbon monoxide that effected a direct and immediate change on the zinc oxide and iron oxide.

¶ 18 Horsehead contends that the phrase “direct and immediate” as used in section 3-50(4) of the Use Tax Act must be afforded its “plain, everyday meaning” but that the tax tribunal gave the term an “overly literal interpretation [that] precludes both activating forces (such as heat) and the concurrent involvement of other chemicals or agents (such as oxygen).” In other words, Horsehead argues that the plain and ordinary meaning of express statutory terms should be given “common-sense” meanings rather than overly literal meanings to avoid excluding too many chemicals from the exemption. Horsehead does not, however, advance any argument on appeal as to what, in the context of the Use Tax Act, the phrase “direct and immediate” means.

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¶ 19 It is a fundamental rule of statutory interpretation to determine and give effect to the intent of the legislature, and the best indicator of that intent is the statutory language, which is to be given its plain and ordinary meaning. *Shared Imaging, LLC v. Hamer*, 2017 IL App (1st) 152817, ¶ 25. Horsehead did not argue before the tax tribunal, and does not argue on appeal, that the term “direct and immediate” is ambiguous, nor does it quarrel with the tax tribunal’s decision to consult a dictionary for the definitions of “direct” and “immediate.” The tax tribunal stated that the plain and ordinary meaning of “direct” includes “[e]xtending or moving from one place to another without changing direction or stopping” and “[w]ithout intervening factors or intermediaries.” English Oxford Living Dictionaries, <https://en.oxforddictionaries.com/definition/direct> (last visited Sept. 19, 2018) [<https://perma.cc/8CEN-V8AG>]; see also Black’s Law Dictionary 471 (7th ed. 1999) (defining “direct” as “straight; undeviating,” and “[f]ree from extraneous influence; immediate”). The tax tribunal defined “immediate” as “[o]ccurring or done at once; instant.” English Oxford Living Dictionaries, <https://en.oxforddictionaries.com/definition/immediate> (last visited Sept. 19, 2018) [<https://perma.cc/338T-GSYF>]; see also Black’s Law Dictionary 751 (7th ed. 1999) (defining “immediate” as “[o]ccurring without delay; instant” and “[h]aving a direct impact; without an intervening agency”). Taken together, a direct and immediate change on a product being manufactured for sale is one that occurs at once without any intervening factors or intermediate steps. As noted above, the chemical exemption provides, “Equipment includes chemicals or chemicals acting as catalysts but only if the chemicals or chemicals acting as catalysts effect a direct and immediate change upon a product being manufactured or assembled for wholesale or retail sale or lease.” 35 ILCS 105/3-50(4) (West 2016). The plain language of the exemption, therefore, means exactly what it says: to be



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eligible under the chemical exemption, the metallurgical coke must effect a change on the zinc and iron in the EAF Dust that occurs at once without an intermediate step.

¶ 20 Here, the tax tribunal concluded that the metallurgical coke did not effect a direct and immediate change on the zinc and iron in the EAF Dust. During the Waelzing processes, the metallurgical coke combines with the carbon dioxide in the kiln to create carbon monoxide. The created carbon monoxide then strips oxygen from the zinc oxide and iron oxide in the EAF Dust, resulting in metallic zinc vapor and metallic iron, which in turn reacts with oxygen, resulting in crude zinc oxide and iron oxide rich material. While the metallurgical coke is an integral part of achieving the desired chemical reactions, the metallurgical coke itself does not effect a direct and immediate change on the products being manufactured: zinc and iron. Before the tax tribunal, one of Horsehead's witnesses acknowledged that "the [metallurgical] coke or carbon [does] not react directly with either the zinc oxide or the iron oxide to reduce them to zinc and iron." As the tax tribunal observed in its final order, "the lack of a direct and immediate reaction dooms [Horsehead's] argument to the contrary."

¶ 21 Furthermore, IDOR's administrative rules provide two examples of chemicals effecting a direct and immediate change.

"A) Example 1. A chemical acid is used to etch copper off the surface of a printed circuit board during the manufacturing process. The acid causes a direct and immediate change upon the product. The acid qualifies for the exemption.

B) Example 2. An aluminum oxide catalyst is used in a catalytic cracking process to refine heavy gas oil into gasoline. In this process, large molecules of gas oil or feed are broken up into smaller molecules. After the catalyst is injected into the feed and used in the cracking process, it is drawn off and reused in

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subsequent manufacturing processes. The catalyst qualifies for the exemption.” 86

Ill. Adm. Code 130.330(c)(6)(A), (B) (2016).

¶ 22 In the first example, the acid, without first going through any intermediate chemical changes, directly and immediately etches copper from the circuit board. In the second example, the aluminum oxide is introduced to heavy gas oil and, without going through any intermediate chemical changes, cracks the large molecules of gas oil and feeds into smaller molecules. Here, the carbon from the metallurgical coke combines with carbon dioxide to create carbon monoxide, which then strips away oxygen from the zinc oxide and iron oxide in the EAF Dust. Horsehead’s use of metallurgical coke, therefore, is part of a series of intermediate steps in the Waelzing process to create the carbon monoxide gas that causes a direct and immediate change to the zinc and iron in the EAF Dust, and it bears little resemblance to the acid and aluminum oxide described in IDOR’s two examples. With respect to IDOR’s second example, Horsehead argues that cracking heavy gas oil through the use of aluminum oxide requires the introduction of heat, just like Horsehead’s metallurgical coke being heated. But even accepting that aluminum oxide is heated during the cracking process, IDOR’s second example contemplates that the heated aluminum oxide causes the cracking of heavy gas oil, as opposed to the heated aluminum oxide causing an intermediate chemical change that in turn causes the cracking. It is clear from IDOR’s second example that the mere introduction of heat to a chemical would not cause that chemical to become ineligible for the exemption in section 3-50(4) of the Use Tax Act.

¶ 23 Horsehead argues that construing section 3-50(4) in a manner that does not exempt Horsehead’s metallurgical coke purchases defeats the purpose of the exemption, which is “to attract new manufacturing facilities to our State and to discourage existing ones from relocating outside Illinois.” *Chicago Tribune Co. v. Johnson*, 106 Ill. 2d 63, 72 (1985). It contends that

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giving the term “direct and immediate effect” an overly literal interpretation “would virtually gut the chemical exemption by excluding any chemicals that must first undergo any process before reacting with the products being manufactured.” That is simply not true; as long as the chemical itself, whether heated or diluted, effects the direct and immediate change on the product being manufactured or assembled for sale, it qualifies for the chemical use tax exemption. Furthermore, we are not in a position to extend the chemical exemption in a manner that would be inconsistent with the plain and ordinary meaning of the terms employed by our legislature in crafting this exemption. It is clear from the plain language of section 3-50(4) of the Use Tax Act that the legislature intended to provide a use tax exemption limited to chemicals or chemicals acting as catalysts that effect a direct and immediate change on the products being manufactured or assembled for sale or lease, and not for all chemicals or chemical catalysts used during the manufacturing process. The legislature is, of course, free to amend or revise the chemical exemption to include chemicals that are used to create other chemicals that effect direct and immediate changes on the products being manufactured. Until it does so, however, we must give the legislature’s words their plain and ordinary meaning.

¶ 24 In sum, we cannot say that the tax tribunal committed clear error in determining that Horsehead’s purchases of metallurgical coke for use during the Waelzing process did not qualify for an exemption under section 3-50(4) of the Use Tax Act. Therefore, we affirm the tax tribunal’s order affirming IDOR’s determination of use tax liability for Horsehead’s out-of-state purchases of metallurgical coke.

¶ 25 Next, Horsehead argues that, should we affirm the tax tribunal’s decision on Horsehead’s use tax liability, the late payment penalties and late filing penalties should be abated because it satisfies the “reasonable cause” exception in section 3-8 of the Uniform Penalty and Interest Act

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(35 ILCS 735/3-8 (West 2016)) and section 700.400 of Title 86 (86 Ill. Adm. Code 700.400(b), (c) (2016)). It argues that the tax tribunal, in upholding the penalties, failed to account for the lack of controlling authority regarding the “unclear” chemical exemption, and instead relied on “its own novel interpretation of the statutory language.”

¶ 26 The parties agree that our review of the tax tribunal’s determination that Horsehead was not entitled to abatement of penalties is governed by the manifest weight of the evidence standard. It is well settled that an agency’s determination of whether reasonable cause exists “will be reversed only if the agency’s decision was against the manifest weight of the evidence and only if the opposite conclusion was clearly evident.” *Hollinger International, Inc. v. Bower*, 363 Ill. App. 3d 313, 315 (2005). “The existence of reasonable cause justifying abatement of a tax penalty is a factual determination that is to be decided only on a case-by-case basis.” *Id.* at 315-16. Horsehead argues, however, that must review *de novo* the tax tribunal’s finding that the chemical exemption is clear because the tax tribunal’s determination as to the clarity of the chemical exemption is entitled to no deference where the tax tribunal does not enforce the Use Tax Act or promulgate any regulations under that act. We have already rejected this argument. See *supra* ¶ 16.

¶ 27 Under the Uniform Penalty and Interest Act, a taxpayer is not subject to penalties if the “failure to file a return or pay tax at the required time was due to reasonable cause.” 35 ILCS 735/3-8 (West 2016). Section 700.400 of Title 86 provides:

“b) The determination of whether a taxpayer acted with reasonable cause shall be made on a case by case basis taking into account all pertinent facts and circumstances. The most important factor to be considered in making a determination to abate a penalty will be the extent to which the taxpayer made a

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good faith effort to determine his proper tax liability and to file and pay his proper liability in a timely fashion.

(c) A taxpayer will be considered to have made a good faith effort to determine and file and pay his proper tax liability if he exercised ordinary business care and prudence in doing so. A determination of whether a taxpayer exercised ordinary business care and prudence is dependent upon the clarity of the law or its interpretation and the taxpayer's experience, knowledge, and education. Accordingly, reliance on the advice of a professional does not necessarily establish that a taxpayer exercised ordinary business care and prudence, nor does reliance on incorrect facts such as an erroneous information return." 86 Ill. Adm. Code 700.400(b), (c) (2001).

¶ 28 We conclude that the tax tribunal's decision to uphold the penalties is not against the manifest weight of the evidence. To determine whether Horsehead acted with reasonable cause, the tax tribunal considered whether Horsehead exercised ordinary business care and prudence, which is in part guided by the clarity of the law or interpretations of that law. The tax tribunal acknowledged that the term "direct and immediate change" in the chemical exemption had no statutory or regulatory definition and that there was no controlling case law as to how the chemical exemption should be interpreted. But the tax tribunal correctly found that "the terms 'direct' and 'immediate' have their simple every day meaning as used in the statute, and those meanings provide clarity to the statute, as opposed to a lack of clarity as argued by [Horsehead].". It is well settled that the best indicator of legislative intent is the language of the statute when given its plain and ordinary meaning. *Shared Imaging*, 2017 IL App (1st) 152817, ¶ 25. While it is true that there was no controlling case law on how those terms should be interpreted within the

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context of the chemical exemption, the plain language of the exemption is clear and unambiguous that only those chemicals that have a direct and immediate effect on the product being manufactured are exempt from the use tax. See *id.* ¶ 78 (upholding the imposition of late filing and late payment penalties where the taxpayer's obligations "should have been clear \*\*\* from the language of the [Use Tax Act] and [IDOR's] regulations"). As we explained above, Horsehead does not argue that the statutory language was ambiguous and does not challenge the tax tribunal's definitions of the terms "direct" and "immediate." The language of the chemical exemption was clear, and Horsehead cannot rely on its own erroneous interpretation of the statute to argue that it exercised ordinary business care and prudence in failing to file and pay the use tax.

¶ 29 Also relevant to the inquiry as to whether Horsehead made a good-faith effort to determine its tax liability is its experience and knowledge. Horsehead does not make any express argument on this point but does insist that its prior history of tax compliance is evidence of a good-faith effort. The tax tribunal considered this argument and gave it "some, but not a great deal of, weight." The tax tribunal noted that Horsehead presented no evidence "to support its claim of good faith in taking the position it did on the chemical exemption issue, although it had the opportunity to do so." Horsehead presented no evidence at the hearing as to any previous audits by IDOR where its out-of-state purchases of metallurgical coke were identified or discussed or that the chemical exemption had ever been raised in a prior audit. Nor was there any evidence that Horsehead sought any professional guidance on its potential use tax liability, which, while not determinative, may have persuaded the tax tribunal of Horsehead's good-faith efforts to comply with the Use Tax Act. In sum, Horsehead's argument that it made a good-faith effort to comply with its use tax obligations because the law surrounding the chemical exemption

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was unclear, that there was no controlling authority available, and that it had paid all of its other taxes is unavailing. Had Horsehead reasonably believed it was exempt from paying a use tax on its out-of-state purchases of metallurgical coke, it would have presented testimony evidencing a business decision that acknowledged a good-faith effort to determine its appropriate tax liability and the reasons why it failed to pay. The absence of any testimony at the hearing in this vein, coupled with its own witness conceding that “the [metallurgical] coke or carbon [does] not react directly with either the zinc oxide or the iron oxide to reduce them to zinc and iron,” supports the tax tribunal’s finding that “reasonable cause” to abate statutory penalties did not exist. Horsehead’s unilateral interpretation of the chemical exemption did not comport with the plain language of the exemption, and it presented no evidence of any other reliance to support its decision to not pay the use tax. Based on the record before the tax tribunal and this court, we cannot say that the tax tribunal’s decision to uphold the imposition of the late payment penalties and late filing penalties was against the manifest weight of the evidence.

¶ 30

#### CONCLUSION

¶ 31 For the foregoing reasons, the final order of the tax tribunal is affirmed.

¶ 32 Tax tribunal decision affirmed.

**ILLINOIS INDEPENDENT  
TAX TRIBUNAL**

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HORSEHEAD CORPORATION,	)	
Petitioner,	)	
	)	
v.	)	14 TT 227
	)	Chief Judge James M. Conway
ILLINOIS DEPARTMENT	)	
OF REVENUE,	)	
Respondent.	)	

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**FINAL JUDGMENT ORDER**

The Petitioner, Horsehead Corporation, a zinc recycler, is challenging two Notices of Tax Liability issued by the Illinois Department of Revenue for Illinois use tax for tax periods between January 2007 and June 2011 totaling approximately \$1,521,041 in taxes, interest and penalties. The Notices were issued by the Department because Horsehead did not pay use tax on its purchases of coke used and consumed in its kilns during its manufacturing process. Horsehead claims it is exempt from paying use tax as the coke used in its manufacturing process acted as a catalyst and qualified under the tax exemption provided for machinery and equipment used primarily in the manufacturing of tangible personal property found at 35 ILCS 105/3-50.

A final hearing was held in this matter and the parties submitted post-hearing briefs.

**A-018**



## 1. Background

### Illinois Sales Tax

The Illinois Retailers' Occupation Tax Act (35 ILCS 120/1, *et seq.*)(ROT) imposes a tax upon persons engaged in this State in the business of selling tangible personal property to purchasers for use or consumption. 86 Ill. Adm. Code 130.101. The Use Tax Act (35 ILCS 105/1, *et seq.*) imposes a tax upon the privilege of using in this State tangible personal property purchased at retail from a retailer. 86 Ill. Adm. Code 150.101. Taken together, those taxes comprise "sales tax" in Illinois.

### Sales Tax Manufacturing Exemption

Under the ROT statute, subsection 35 ILCS 120/2-5(14) provides, in part:

Sec. 2-5. Exemptions. Gross receipts from proceeds from the sale of the following tangible personal property are exempt from the tax imposed by this Act: ...

(14) Machinery and equipment that will be used by the purchaser, or a lessee of the purchaser, primarily in the process of manufacturing or assembling tangible personal property for wholesale or retail sale or lease, whether the sale or lease is made directly by the manufacturer or by some other person, whether the materials used in the process are owned by the manufacturer or some other person, or whether the sale or lease is made apart from or as an incident to the seller's engaging in the service occupation of producing machines, tools, dies, jigs, patterns, gauges, or other similar items of no commercial value on special order for a particular purchaser...35 ILCS 120/2-5(14).

Under the Use Tax statute, subsection 35 ILCS 105/3-5(18) contains virtually identical language:

Sec. 3-5. Exemptions. Use of the following tangible personal property is exempt from the tax imposed by this Act: ...

(18) Manufacturing and assembling machinery and equipment used primarily in the process of manufacturing or assembling tangible personal property for wholesale or retail sale or lease, whether that sale or lease is made directly by the manufacturer or by some other person, whether the materials used in the process are owned by the manufacturer or some other person, or whether that sale or lease is made apart from or as an incident to the seller's engaging in the service occupation of

producing machines, tools, dies, jigs, patterns, gauges, or other similar items of no commercial value on special order for a particular purchaser.... 35 ILCS 105/3-5(18).

Under the Use Tax Statute, subsection 35 ILCS 105/3-50(4)<sup>1</sup> provides:

§ 3-50. Manufacturing and assembly exemption. ...For the purposes of this exemption, terms have the following meanings: ...

(4) "Equipment" includes an independent device or tool separate from machinery but essential to an integrated manufacturing or assembly process; including computers used primarily in a manufacturer's computer assisted design, computer assisted manufacturing (CAD/CAM) system; any subunit or assembly comprising a component of any machinery or auxiliary, adjunct, or attachment parts of machinery, such as tools, dies, jigs, fixtures, patterns, and molds; and any parts that require periodic replacement in the course of normal operation; but does not include hand tools. **Equipment includes chemicals or chemicals acting as catalysts but only if the chemicals or chemicals acting as catalysts effect a direct and immediate change upon a product being manufactured or assembled for wholesale or retail sale or lease.** (emphasis added). 35 ILCS 105/3-50(4).

#### **The Department's Manufacturing Exemption Regulation**

The Department's Regulation on manufacturing machinery and equipment, 86 Ill. Adm. Code 130.330, limits what chemicals can be considered as chemicals and chemicals acting as catalysts which qualifies them for the manufacturing exemption in subsection (c)(6):

6) The exemption includes chemicals or chemicals acting as catalysts but only if the chemicals or chemicals acting as catalysts effect a direct and immediate change upon a product being manufactured or assembled for sale or lease. (Section 2-45 of the Act) The following examples are illustrative:

A) Example 1. A chemical acid is used to etch copper off the surface of a printed circuit board during the manufacturing

<sup>1</sup> The ROT statute contains the identical language at 35 ILCS 120/2-45(4).

process. The acid causes a direct and immediate change upon the product. The acid qualifies for the exemption.

B) Example 2. An aluminum oxide catalyst is used in a catalytic cracking process to refine heavy gas oil into gasoline. In this process, large molecules of gas oil or feed are broken up into smaller molecules. After the catalyst is injected into the feed and used in the cracking process, it is drawn off and reused in subsequent manufacturing processes. The catalyst qualifies for the exemption. 86 Ill. Adm. Code 130.330(c)(6).

### **Horsehead Corporation**

The Petitioner, Horsehead Corporation,<sup>2</sup> is a Delaware corporation with its headquarters in Pennsylvania. Horsehead produces zinc, zinc oxide and zinc powder from recycled sources through multiple facilities, including a processing plant in Calumet City, Illinois. Once Horsehead extracts and produces zinc in its various forms, those products are sold to third parties or for resale.

### **Horsehead's Zinc Extraction Process**

The zinc extraction process at Horsehead's Calumet City facility begins with Horsehead obtaining electric arc furnace dust (EAF Dust) from steel mill producers. EAF Dust contains zinc oxide, iron oxide and various impurities which may include chlorides, lead and cadmium. Horsehead heats the EAF Dust with coke in Waelz kilns to a point where impurities are stripped away from the zinc oxide, pure zinc is extracted and zinc is collected in powder form. The remaining EAF Dust is heated to a higher temperature in order for the iron (ferrous) oxide, which has a higher melting point than zinc oxide, to be separated from impurities. The resulting zinc powder, also known as zinc dust, and the iron-rich material is sold to third parties for use in their own manufacturing processes.

### **The Waelzing Process**

Three witnesses were called to explain the "Waelzing process" at the final hearing by the Petitioner: John Schlesinger, Ph.D. and professor of metallurgical engineering at Missouri University of Science and Technology; John Pusateri, the Director of Technology at AZR; and Reges Zagrocki, an employee of AZR who

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<sup>2</sup> Horsehead Corporation changed its name to American Zinc Recycling, Corp. (AZR) in May 2017 according to the AZR website.

provides technical support to AZR's recycling groups. Dr. Schlesinger testified as an expert witness.

Horsehead utilizes two rotary Waelz kilns to process EAF Dust and to extract zinc at its Calumet City plant. Joint Final Pretrial Order Stip.1. One kiln is approximately 180 feet long and 10 and a half feet in diameter and the other kiln is 160 feet long and 12 feet in diameter. The kilns are slightly inclined and rotate slowly on their axes. EAF Dust and coke are heated in the kilns. *Id.*

Horsehead purchases finished coke, which is more expensive than coal, for use in its Waelz kilns. John Pusateri testified that "Metallurgical coke is produced during the destructive distillation of coal." Tr. 47-48.<sup>3</sup> During that process, coal is heated to give off compounds and volatile materials, such as methane, which results in a material higher in carbon than ordinary coal. The carbon material is screened, and the fine particles, or "breeze," is collected and sold as finished coke. *Id.*

The first step in processing the coke and EAF Dust for use in a Waelz kiln is to pelletize those materials by mixing the EAF Dust, which is a fine brown powder, with the metallurgical or finished coke compound, at about a twenty-five percent ratio to the EAF Dust. Water is also added to the mixture so that the powders cling together. The mixture produces pellets that are a quarter of an inch or less in diameter. Tr. 51-53. The purpose of pelletizing the powdered coke and EAF Dust is twofold: first, it makes the physical handling of the powders into the feed tube of a kiln easier, and, second, it places the right amount of carbon in the vicinity of the EAF Dust so that the twenty-five percent ratio for further processing can be achieved. Tr. 53.

When pellets enter a Waelz kiln, the pellets are fed on one side of the kiln and oxygen from the air outside the kiln is drawn in on the opposite side of the kiln. Tr. 55-56; Petr. Ex. 2A.<sup>4</sup> An external energy source, a natural-gas burner, is used to begin heating the kiln. The heated air within the kiln begins to dry out the pellets and heats the pellets to 600-700 degrees centigrade at which point chemical reactions begin to occur.

This initial process is described as the drying zone, the first of four "zones" that encompass the overall processing steps that occur in a Waelz kiln. Petr. Ex.1. The overall processing steps within the four zones take approximately two to two

<sup>3</sup> "Tr." followed by a number refers to the transcript of proceedings for the final hearing in this matter.

<sup>4</sup> For one of Horsehead kilns, just the EAF Dust is pelletized and coke is added with the pellets as those two items are fed into that kiln. Tr. 88; 90.

and a half hours from start to finish. Tr. 82. At the conclusion of the overall processing steps, virtually all the coke is consumed. Tr. 79; 82-83.

The second zone in the kiln is described as the "reduction zone." *Id.* Several chemical reactions occur in this stage. As the coke burns, carbon from the coke reacts with carbon dioxide to create carbon monoxide.<sup>5 6</sup> Tr. 24. That conversion is an endothermic process, or one which consumes energy. Tr.27-28.

The carbon monoxide acts as a reducing agent.<sup>7</sup> Tr. 38; 61. The carbon monoxide seeps into the bed of the Waelz kiln and reduces the zinc oxide in the bed to zinc vapor. Tr. 24.<sup>8</sup> The carbon monoxide also reduces the iron oxide in the bed of the kiln to metallic iron. Tr. 61-63.<sup>9</sup> Both the zinc oxide and the iron oxide reductions produce carbon dioxide along with zinc and iron. That carbon dioxide reacts with the burning carbon to create additional carbon monoxide, and those cycles continue through the zone two processes. Tr. 61-62.

In the third zone of the Waelzing process, the metallic iron reacts with the oxygen in the air to reform iron oxide. Tr. 26.<sup>10</sup> That reaction is exothermic, which generates heat. Tr. 26. By the time the entire Waelzing process is completed, the kiln reaches temperatures between 1,000 and 1,100 degrees centigrade due to the exothermic processes occurring within the kiln. Tr. 60. The exothermic reactions occurring in the kiln that create heat make the Waelz process self-sustaining. Tr. 57-59.

In the fourth, or final zone, of the Waelz process, the zinc vapor rises from the kiln and reacts with the oxygen dioxide in the air to form zinc oxide. Tr. 28-29.<sup>11</sup> This reaction is also exothermic which adds to overall heating of the kiln. Tr.29. The zinc oxide is small particulate matter which is drawn off from the top of the kiln. Tr. 29-30. The zinc oxide particulate is what is called Waelz oxide, or crude zinc oxide. That material is sent to another Horsehead plant in Pennsylvania,

<sup>5</sup> "Under normal circumstances, when coke is burned in an oxygen rich atmosphere (such as outside the kiln), the carbon (C) in the coke burns to produce carbon dioxide (CO<sub>2</sub>). However, when it is burned in an oxygen-poor atmosphere (such as in the kiln), some of the carbon forms carbon monoxide (CO)." Parties Joint Stipulation #2.

<sup>6</sup> Stated as a chemical formula,  $C + CO_2 = 2CO$

<sup>7</sup> "Reduction reactions are the ones that convert iron oxide into metallic iron and zinc oxide into zinc vapor." Tr. 32.

<sup>8</sup>  $ZnO (solid) + CO = Zn(a gas) + CO_2$

<sup>9</sup>  $FeO (solid) + CO = Fe(a solid) + CO_2$

<sup>10</sup>  $Fe + \frac{1}{2}O_2 = FeO$

<sup>11</sup>  $Zn + \frac{1}{2}O_2 = ZnO$

where it is further refined in a kiln to boil off certain impurities such as chlorides, compounds and oxides before the zinc oxide is sold to customers. Tr. 66-67.

The metallic iron which was formed during the Waelzing process is also collected and sold to Horsehead customers, primarily cement plants, which use that iron in making a certain type of Portland cement. Tr. 68.

## 2. Analysis

### A. Burden of Proof

The two Notices of Liability offered in evidence by the Department at the final hearing provide *prima facie* proof that the Department's assessments in those notices are correct. 35 ILCS 120/4; 35 ILCS 105/12.

The parties have presented the sole substantive issue in this case to be whether the coke used by Horsehead in its Waelz kilns to reclaim zinc and metallic oxides from EAF dust meets the definition of a chemical or a chemical acting as a catalyst for purposes of qualifying for the manufacturing machinery and equipment exemption from Illinois use tax. 35 ILCS 105/3-50(4). As a general proposition, a taxpayer claiming an exemption from tax bears the burden of proving it is entitled to the exemption. "Under Illinois law, taxation is the rule. Tax exemption is the exception." *Provena Covenant Medical Center v. Dep't of Revenue*, 236 Ill. 2d 368, 388 (2010). "A person claiming an exemption from taxation has the burden of proving clearly that he comes within the statutory exemption. Such exemptions are to be strictly construed, and doubts concerning the applicability of the exemptions will be resolved in favor of taxation." *Zenith Electronics Corp. v. Dep't of Revenue*, 293 Ill. App. 3d 651, 655 (1<sup>st</sup> Dist. 1997) (citing *Van's Material v. Dep't of Revenue*, 131 Ill. 2d 196, 216 (1989)).

### B. The Chemical Exemption

The pertinent portion of the manufacturing and machinery equipment exemption statute for this case is: "Equipment includes chemicals or chemicals acting as catalysts but only if the chemicals or chemicals acting as catalysts effect a direct and immediate change upon a product being manufactured or assembled for wholesale or retail sale or lease." 35 ILCS 105/3-50(4).

To determine whether Horsehead's purchases of coke qualify for the exemption from use tax, the plain language of the that statutory subsection must be reviewed and interpreted. "The fundamental rule of statutory interpretation is to determine and give effect to the intent of the legislature, and the statutory language is the best indicator of the legislature's intent." *Quality Saw & Seal, Inc. v. Ill. Commerce Comm'n*, 374 Ill. App. 3d 776, 781, (2<sup>nd</sup> District 2007). "The best indication of legislative intent is the statutory language, given its plain and ordinary meaning." *Andrews v. Kowa Printing Corp.*, 217 Ill. 2d 101, 106 (2005). "Where the language is clear and unambiguous, we must apply the statute without resort to further aids of statutory construction." *Id.*

To qualify for the exemption, the chemicals or chemicals acting as a catalyst must effect "a direct and immediate" change upon a product being manufactured. The plain and ordinary meaning of "direct" includes "1) Extending or moving from one place to another without changing direction or stopping....2) Without intervening factors or intermediaries." (<https://en.oxforddictionaries.com/definition/direct>).

Immediate is defined includes "Occurring or done at once: instant." (<https://en.oxforddictionaries.com/definition/immediate>).

The terms "direct" and "immediate" are clear and unambiguous, so there is no need to resort to further aids of statutory construction. The Department regulations<sup>12</sup> provides two examples of reactions that are direct and immediate:

A) Example 1. A chemical acid is used to etch copper off the surface of a printed circuit board during the manufacturing process. The acid causes a direct and immediate change upon the product. The acid qualifies for the exemption.

B) Example 2. An aluminum oxide catalyst is used in a catalytic cracking process to refine heavy gas oil into gasoline. In this process, large molecules of gas oil or feed are broken up into smaller molecules. After the catalyst is injected into the feed and used in the cracking process, it is drawn off and reused in subsequent manufacturing processes. The catalyst qualifies for the exemption. 86 Ill. Adm. Code 130.330(c)(6).

<sup>12</sup> Administrative regulations have the force and effect of law and are interpreted with the same canons as statutes. See *Hartney Fuel Oil Co. v. Hamer*, 2013 IL 115130, ¶37 (citing *People ex rel. Madigan v. Ill. Commerce Comm'n*, 231 Ill. 2d 370, 380 (2008)).

Does Horsehead's coke directly and immediately cause a change the product, zinc, being sold by Horsehead? The direct and immediate answer is "No."

Coke does not react with zinc oxide or zinc directly and immediately. Simply placing coke next to zinc oxide or zinc does not create any chemical reaction whatsoever, a point conceded by Horsehead's own witnesses. Tr. 24; Tr. 77. "Q. Okay. So, in other words, --so all these steps have to take place? In other words, the coke or carbon do not react directly with either the zinc oxide or the iron oxide to reduce them to zinc and iron? That's correct; is it not? A. That's right." Tr. 37-38. The lack of a direct and immediate reaction dooms the Petitioner's argument to the contrary.

One of the first in the series of chemical reactions that take place during the entire Waelz process, which occurs over several hours, is the formation of carbon when the solid coke is heated, burned and consumed. One chemical reaction that occurs afterwards is the combination of carbon with oxygen to form carbon monoxide. Following that reaction, carbon monoxide reduces both zinc oxide and iron oxide to zinc and iron while carbon dioxide is also formed. The final material reactions in the kiln are for the zinc and iron to combine with oxygen dioxide in the air in the kiln to form zinc oxide and iron oxide. Nowhere within those chemical processes and reactions, does coke have a direct and immediate effect on zinc oxide and iron oxide.

Horsehead's argument that coke has a direct and immediate effect on the final zinc and iron products relies on collapsing and conflating all steps within the Waelz process into one continuous and singular chemical reaction. That simplistic view turns the chemical exemption statute on its head as it would logically follow that any chemical which is used for any reason at any time during a manufacturing process would qualify for the exemption despite not causing a direct or immediate change on the final product. The limiting language used by the Illinois legislature in the exemption statute clearly indicate their intent to include only chemicals or chemicals that act as catalysts that effect a direct and immediate change as the only types of chemicals that qualify for the exemption.

Horsehead's argument renders the language "direct and immediate" void. "In giving meaning to the words and clauses of a statute, no part should be rendered superfluous" and "[s]tatutory provisions should be read in concert and harmonized." *Hartney Fuel Oil Co. v. Hamer*, 2013 IL 115130, ¶ 25 (citing *Standard Mutual Insurance Co. v. Lay*, 2013 IL 114617, ¶ 26 and *People v. Rinehart*, 2012 IL 111719, ¶ 26).



In its presentation at the final hearing of this case, all three of Horsehead's witnesses were asked to explain the Waelz process. They were all shown demonstrative exhibits consisting of four charts, each representing the four zones of the Waelz process. (Pet'r Ex. 2A-2D). In a case where each step of the process had to be reviewed and analyzed to determine whether coke qualifies for the manufacturing exemption, the chemical reactions displayed on Chart 2B were inaccurate and misleading as the formulas stated on that chart that carbon reacts with iron oxide and zinc oxide when it is carbon monoxide, not carbon, that reacts with those two compounds. That chart "compresses" the overall reactions which puts the coke closer to the final product reactionwise. The inaccuracies of the various chemical reactions were cleared up somewhat during the expert witness's testimony:

Q. And the only reason I say that is because you said that there were a couple, you know, this is kind of short-handing a couple steps. I think that's what's being short-handed.

A. Well, what's being short-handed is the overall reduction reaction. The reduction reaction that you see reacts iron oxide to carbon to produce iron and  $\text{CO}_2$ ; but, in fact, if I were to take a hunk of solid iron oxide and place it next to a hunk of solid carbon, nothing would happen because that then would be a solid state reaction. So what actually happens in this process is that as this reaction generates  $\text{CO}_2$ , it reacts with the carbon to produce two carbon monoxides. The carbon monoxide is a gas and can diffuse into the solid feed pellets; and when that happens, the carbon monoxide actually reduces the iron oxide to metallic iron and reduce the zinc oxide to zinc vapor. Once that happens, in the process of reducing it, the carbon monoxide becomes carbon dioxide; and then that frees up the carbon dioxide to react with more carbon and produce more carbon monoxide to keep the reduction process moving

Q. Just to drill down on that, you said if you started with the two solid components of this reaction and you just put a solid next to a solid, nothing would happen.

A. Yeah. Tr. 23-24.

The other two witnesses also acknowledged that the charts were inaccurate. "Well, the carbon is actually—these reduction reactions are a little bit simplified as what actually occurs is the carbon—as the bed heats up, the carbon in the bed

begins to partially oxidize to carbon monoxide: and that is the main reducing agent for iron oxide and zinc oxide..." Tr. 78. "Q. Okay. Just to make this clear, where the equation shows, for example, FeO plus C reacts and forms Fe iron plus CO<sub>2</sub>, this really should be FeO, meaning iron oxide, this really should be CO, carbon monoxide, correct? A. Yes." Tr. 100.<sup>13</sup>

### Catalysts

The plain language of 35 ILCS 105/3-50(4) includes the term "catalyst." A chemical catalyst is defined as "A substance that enables a chemical reaction to proceed at a faster rate or under different conditions (as at a lower temperature) than possible." Merriam Webster Online Dictionary.

In his opening statement and closing argument, both of which are not evidence, counsel for Horsehead used the term "catalyst," but did not use it to describe the chemical compound at issue, coke, but for one of its byproducts, carbon. "You will also hear how the carbon acts as a catalyst...Under the applicable tax rules, the carbon-if carbon is a catalyst, it will be exempt from use tax." Tr. 8-9. (opening statement). "The carbon in the coke is being converted to a gaseous form because that's how the reaction occurs. Just like any kind of catalyst particulate -catalyst process, you need the presence of the carbon just like you need--as you need the presence of any other catalyst for the reaction to occur." Tr. 107. (closing argument). That claim was also repeated in the Petitioner's Post-Trial Brief. "In order to refine the zinc and iron from the EAF Dust, Petitioner has to use a chemical catalyst." Pet'r Post-Trial Brief at 1,3.

Neither coke, or even carbon, is a catalyst under the definition for catalyst, above, but are simply chemical compounds and chemicals necessary to be integrated in the overall chemical processes used to extract zinc and iron oxide from the EAF Dust in Horsehead's Waelz kilns. Most telling, despite calling an expert witness and two experienced and knowledgeable employees of Horsehead, none of the witnesses were asked to define the term "catalyst," and none of the questions posed or the answers given by any of the witnesses included the term "catalyst."<sup>14</sup>

<sup>13</sup> Charts 2C and 2D contain the same inaccuracies as they both repeat the reactions occurring in Zone 2 of the Waelz process. Tr. 101.

<sup>14</sup> Petitioner makes the additional arguments that 1) coke should not be considered to be coal, and therefore disqualified for the exemption as a fuel under 86 Ill. Adm. Code 130.330(c)(3), and 2) even though the coke is consumed, as opposed to being reused, it still would qualify for the exemption. Pet'r Post-Trial Brief at 10-13. Because the coke does not effect a direct and immediate change on the zinc as an initial matter, these issues are moot and do not need to be decided at this time.

### Direct and Immediate Changes

To support its position that coke effects a direct and immediate change on the zinc product it sells, Horsehead refers to *PPG Industries, Inc. v. Department of Revenue*, (No. 13 L 050140, September 9, 2014). However, that case is a circuit court case with no precedential value.<sup>15</sup> Petitioner properly identified *PPG* as a circuit court case and proceeded to argue that its use of coke effects a direct and immediate change on zinc based on a review of that case. In addition to being non-precedential, the analysis in *PPG* is not persuasive.

In *PPG*, the taxpayer manufactured glass through a float process in which raw material was fed into a 200-foot-long furnace which was heated and which produced 1500 ton batches of molten glass.<sup>16</sup> The molten glass was poured onto molten tin and formed a continuous glass ribbon. The glass ribbon moved from the furnace through a 60-foot cooling chamber known as a float bath and, finally, to an oven where stresses in the glass were removed. After those processes, the glass was cut and sold.

The float bath was used to size glass, create a uniform thickness in the glass and to cool the glass. The taxpayer used nitrogen and hydrogen to cool the heating elements and other machinery located in the upper plenum of the bath chamber and to pressurize the lower plenum to reduce the amount of oxygen in the bath's atmosphere.

The administrative law judge found that the nitrogen and hydrogen did not effect a direct and immediate change on the glass being manufactured for sale. He determined those chemicals were used to cool the machinery in the bath chamber, and that the hydrogen reacted with oxygen in the bath chamber as opposed to reacting to the final product, glass. Accordingly, the administrative law judge decided against the taxpayer and held that hydrogen and nitrogen purchases by the taxpayer did not qualify for the exemption under 35 ILCS 105/3-50(4).

The circuit court judge overruled that finding. He did agree that the nitrogen and hydrogen did not react chemically with the glass, but decided that the two chemicals still qualified for the exemption. The court held that a

<sup>15</sup> There is no Illinois Appellate Court case, which would be precedential, that defines "direct and immediate" for purposes of the chemical exemption statute.

<sup>16</sup> The following factual underpinnings of *PPG* are taken from the underlying Department's administrative law decision, UT 13-07 (11/29/2012). The circuit court adopted the findings of fact made by the administrative law judge and reversed the administrative law judge's decision.

"proximate" cause of an event was the equivalent of being a "direct" cause of an event.

The circuit court judge was wrong in determining that the term "direct" for purposes of 35 ILCS 105/3-50(4) should be defined to encompass any chemical reaction that was in a proximate causal relationship with the ultimate item being manufactured. As stated above, the term "direct" is easily defined as "(1) Extending or moving from one place to another without changing direction or stopping....(2) Without intervening factors or intermediaries." The simple definition of "direct" does not encompass the legal theory of proximate cause, a term used for negligence and criminal actions.

For example, "To recover in negligence actions, a plaintiff must establish that defendant owed a duty to plaintiff and that the breach of this duty proximately caused the injuries of which plaintiff complains." *Bogovich v. Nalco Chemical Co.*, 213 Ill. App 3d 439, 441 (1<sup>st</sup> Dist. 1991). "Proximate cause has been defined as that cause which, in natural or probable sequence, produces the complained of injury." *Id.* (citing cases).

To adopt Horsehead's unwieldy argument that any chemical reaction which "proximately caused" a final product would, once again, turn the chemical exemption statute on its head. That broad application would mean that any chemical used in a chemical process would be encompassed in the universe of exempt chemicals under that statute as opposed to the finite group of chemicals that were clearly intended by the state legislature to be included as exempt chemicals-only those that effected a direct and immediate change on a final manufactured product.

Even assuming, arguendo, that the term or legal theory of proximate cause could be included in a tax statute, the state legislature chose not to do so. In *People v. Wilson*, 343 Ill. App 3d 244 (3<sup>rd</sup> Dist. 2010), the court noted that the term "probable cause" appeared in 19 Illinois statutes. *Id.* at 248. Had the Illinois legislature wanted to use the term "proximate cause" in enacting or amending the chemical exemption statute and use that term in lieu of "direct," it clearly could have done so. In choosing not to do so, the legislature clearly signaled that the term "direct" means just that, and nothing more.

Moreover, Horsehead's argument also fails to address the term "immediate" used in conjunction with the term "direct" in the chemical exemption statute. In *Wilson*, the court quoted the 2009 Illinois Pattern Jury Instruction, Civil, No. 15.01, "When I use the expression 'proximate cause,' I mean a cause which, in the

natural and ordinary course of events, produced the plaintiff's injury. It need not be the only cause, nor the last or nearest cause. It is sufficient if it combines with another cause resulting injury."

Accordingly, a proximate cause is not required to have the temporal limitation of immediacy to an injury. It can occur any time prior to a final injury so long as it produces the injury. That is the opposite of the required temporal limitation that describes chemical reactions that must occur for a chemical to qualify for the exemption under 35 ILCS 105/3-50(4). Only those chemicals which effect a direct and immediate change upon a product being manufactured are exempt.

### **C. Imposition of Penalties**

Late payment and late filing penalties were imposed on Horsehead in the relevant Notices of Liability in this matter pursuant to the Uniform Penalty and Interest Act, incorporated in the Use Tax Act at 35 ILCS 105/12. Horsehead believes those penalties should not have been imposed as it had reasonable cause to take the position it did on the singular substantive issue of whether the purchases of coke used in its Calumet City, Illinois Waelz kilns qualified for an exemption under 35 ILCS 105/3-50(4).

The Department's Regulation on what should be considered as reasonable cause to avoid penalties, reads, in part:

b) The determination of whether a taxpayer acted with reasonable cause shall be made on a case by case basis taking into account all pertinent facts and circumstances. The most important factor to be considered in making a determination to abate a penalty will be the extent to which the taxpayer made a good faith effort to determine his proper tax liability and to file and pay his proper liability in a timely fashion.

c) A taxpayer will be considered to have made a good faith effort to determine and file and pay his proper tax liability if he exercised ordinary business care and prudence in doing so. A determination of whether a taxpayer exercised ordinary business care and prudence is dependent upon the clarity of the law or its interpretation and the taxpayer's experience, knowledge, and education. Accordingly, reliance on the advice of a professional does not necessarily establish that a taxpayer exercised ordinary business care and prudence, nor does reliance on incorrect facts

such as an erroneous information return. 86 Ill. Adm. Code 700.400(b) and (c).

Horsehead argues that in compliance with subsection (c) above, the lack of a specific definition of the term "direct and immediate change" in the chemical exemption statute, rendered that law unclear. Pet'r Post-Trial Brief at 14-15. As support for its position, it points to the fact that the Circuit Court judge in the non-precedential case, *PPG Industries, Inc. v. Dep't of Revenue*, (No. 13 L 050140, September 9, 2014), noted as much. Horsehead also claims that its filing history with the Department, which was noted in the audit file, reflected compliance in all regards to its state taxes otherwise. *Id.* at 15.

As to its latter argument, taxpayers are expected to be compliant with tax laws and be up to speed in filing and paying taxes. Horsehead has shown good conduct in that regard. That conduct carries some, but not a great deal of, weight in supporting its claim of good faith when it failed to pay use tax on its purchases of coke.

During the final hearing in this matter, Horsehead did not present any witness or evidence to support its claim of good faith in taking the position it did on the chemical exemption issue, although it had the opportunity to do so.<sup>17</sup> The record in this case is silent as to what or who the taxpayer relied upon in choosing to claim its coke purchases as catalysts when it chose not to pay the use tax in question other than the Petitioner's claim that the term "direct and immediate" is undefined, leaving the chemical exemption statute unclear.

In its Supplemental Post-Trial Brief, the Petitioner alleges that it had been audited by the Department previously, and that no adjustment was proposed as to its coke purchases. That may be true, but there was no evidence at the final hearing as to any previous audits, and, more importantly, there was no evidence at the final hearing that the coke exemption issue was ever raised in any other audit and if being raised, the action of the Department in acquiescing to that issue gave comfort to the taxpayer that its position rested on sound footing.

In its Post-Trial Brief and again in its Supplemental Post-Trial Brief, the Petitioner cites to the non-precedential circuit court opinion in *PPG* as further support for its claim of good faith as that court noted there was no statutory or regulatory definition of "direct and immediate change." Pet'r Post-Trial Brief at 4-

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<sup>17</sup> The Department's audit file which was admitted into evidence, but not referred to during the hearing, referenced Horsehead's history of tax compliance.

15: Pet'r Supplemental Post-Trial Brief at 2. "As recently as the Circuit Court's 2014 decision in *PPG Industries*, *infra*, the Court concluded that there was no statutory or regulatory definition of those terms (*PPG Industries*, *infra*). Accordingly, if the Circuit Court took judicial notice of the fact that the sole applicable statute and regulation were missing definitions of the key operative words, it would be fair to say the law was unclear." Pet'r Post-Trial Brief at 14-15.

It is clear, without reading that circuit court case, that there was no statutory or regulatory definition of the term "direct and immediate change" for purposes of the chemical exemption, but that begs the question as to whether that allows the Petitioner to claim good faith in this case. As stated previously, the terms "direct" and "immediate" have their simple every day meaning as used in the statute, and those meanings provide clarity to the statute, as opposed to a lack of clarity as argued by the Petitioner.<sup>18</sup>

The Notices of Liability in this case are for tax periods between January 2007 and June 2011. The unpublished circuit court opinion in *PPG* wasn't issued until 2014, well after the use tax on Horsehead's coke purchases should have been paid. While it is proper to adopt any reasoning in that decision in making an argument about the substantive issue in this case, it is another matter to cite to that court case as support for a claim of good faith when the decisions to not pay the use tax predates that court case by years.

Petitioner's argument that it was in good faith when it failed to pay use tax on its purchases of coke is rejected.

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<sup>18</sup> To be sure, a statute or regulation which lacks clarity may, standing alone, provide a taxpayer a basis to claim good faith as to that taxpayer's position on an issue in dispute.

**D. Conclusion**

The two Notices of Liability in the matter are affirmed in their entirety. The assessments of use tax, interest, late filing and late payment penalties are affirmed.

This is a final order subject to review under section 3-113 of the Administrative Review Law, and service by email is service under section 3-113(a). The Illinois Independent Tax Tribunal is a necessary party to any appeal.

*s/ James Conway*  
JAMES M. CONWAY  
Chief Administrative  
Law Judge

Date: October 13, 2017



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Search	adv: ((interpret! OR construct! /s stat. OR statute OR statutory OR I.L.C.S. OR Ill.Rev.Stat. OR ill.comp.stat. OR smith-hurd) OR DI(361iii)) AND (oxford /s dictionary) AND DA(aft 1890) (44) Search Type: Boolean T&C Content: Illinois Appellate Court Cases Jurisdiction: Illinois	02/28/2019 1:02 PM	[REDACTED]

## All History

Event	Description	Date/Time	Client ID
Search	adv: ((interpret! OR construct! /s stat. OR statute OR statutory OR I.L.C.S. OR Ill.Rev.Stat. OR ill.comp.stat. OR smith-hurd) OR DI(361iii)) AND (oxford /s dictionary) AND (black OR "legal usage" /s dictionary) AND DA(aft 1890) (0) Search Type: Boolean T&C Content: Illinois Supreme Court Cases Jurisdiction: Illinois	02/28/2019 12:59 PM	[REDACTED]
Search	adv: ((interpret! OR construct! /s stat. OR statute OR statutory OR I.L.C.S. OR Ill.Rev.Stat. OR ill.comp.stat. OR smith-hurd) OR DI(361iii)) AND (black OR "legal usage" /s dictionary) AND DA(aft 1890) (236) Search Type: Boolean T&C Content: Illinois Supreme Court Cases Jurisdiction: Illinois	02/28/2019 12:57 PM	[REDACTED]
Search	adv: ((interpret! OR construct! /s stat. OR statute OR statutory OR I.L.C.S. OR Ill.Rev.Stat. OR ill.comp.stat. OR smith-hurd) OR DI(361iii)) AND (oxford /s dictionary) AND DA(aft 1890) (3) Search Type: Boolean T&C Content: Illinois Supreme Court Cases Jurisdiction: Illinois	02/28/2019 12:57 PM	[REDACTED]

SA-002

**IN THE CIRCUIT COURT OF COOK COUNTY, ILLINOIS  
COUNTY DEPARTMENT, LAW DIVISION  
TAX & MISCELLANEOUS REMEDIES SECTION**

**PPG INDUSTRIES, INC.,**

**Plaintiff,**

**v.**

**No. 13 L 050140**

**ILLINOIS DEPARTMENT OF REVENUE, and  
BRIAN A. HAMER, as Director of the Illinois  
Department of Revenue,**

**Defendants.**

**ORDER and OPINION**

**I. ORDER**

PPG Industries, Inc. ("PPG") appeals a December 4, 2012 decision of the Director of Revenue (the "Decision"), which accepted the Administrative Law Judge's Recommendation (the "Recommendation") that PPG's refund claim be denied. PPG seeks a refund of use tax paid in tax years 2004 through 2006 on purchases of nitrogen and hydrogen that PPG used to manufacture glass at its plant in Mount Zion, Illinois. For the reasons stated below, the Decision is REVERSED. The Illinois Department of Revenue ("Department") shall issue a refund to PPG of \$329,761 in tax, plus applicable interest.

**Statutory and Regulatory Framework**

Illinois' Use Tax Act ("UTA") is set out at 35 ILCS 105/3 (2013). During the tax periods at issue (2004-2006), Section 3-5 of the UTA provided an exemption for manufacturing machinery and equipment. The UTS includes certain chemicals as "equipment," and provides as follows:

**Sec. 3-5. Exemptions.** Use of the following tangible property is exempt from the tax imposed by this Act.

\*\*\*

(18) Manufacturing and assembling machinery and equipment used primarily in the process of manufacturing or assembling tangible personal property for wholesale or retail or lease . . .

Section 3-50 of the UTA further provides:

Sec. 3-50. Manufacturing and assembly exemption . . . . For the purposes of this exemption, terms have the following meanings:

- (1) "Manufacturing process" means the production of an article of tangible personal property, whether the article is a finished product or an article for use in the process of manufacturing or assembling a different article of tangible personal property, by a procedure commonly regarded as manufacturing . . .

\*\*\*

- (4) "Equipment" includes . . . chemicals or chemicals acting as catalysts but only if the chemicals or chemicals acting as catalysts effect a direct and immediate change upon a product being manufactured or assembled for wholesale or retail sale or lease.

ILL. ADMIN. CODE tit. 86, § 130.330 (2013) similarly provides:

Section 130.330 Manufacturing Machinery and Equipment

\*\*\*

c) Machinery and Equipment

\*\*\*

6) *The exemption includes chemicals or chemicals acting as catalysts but only if the chemicals or chemicals acting as catalysts effect a direct and immediate change upon a product being manufactured or assembled for sale or lease (Section 2-45 of the Act). The following examples are illustrative:*

- A) Example 1. A chemical acid is used to etch copper off the surface of a printed circuit board during the manufacturing process. The acid causes a direct and immediate change upon the product. The acid qualifies for the exemption.
- B) Example 2. An aluminum oxide catalyst is used in a catalytic cracking process to refine heavy gas oil into gasoline. In this process, large molecules of gas oil or feed are broken up into smaller molecules. After the catalyst is injected into the feed and used in the cracking process, it is drawn off and reused in subsequent manufacturing processes. The catalyst qualifies for the exemption.



### Factual Background

The Court, upon hearing of this matter on August 20, 2014, adopted the findings of fact made by the administrative judge as listed in the Recommendation.

### Conclusions of Law

Tax exemption statutes must be read reasonably to give fair effect to the General Assembly's intent. *Swank v. Dep't of Revenue*, 336 Ill. App. 3d 861, 857, 785 N.E. 2d 204, 209 (Ill. Ct. App. 2003). Where ambiguity or doubt exists, exemption statutes are construed in favor of taxation. *See id.* at 855, 207; *Provena Convent Medical Center v. Dep't of Revenue*, 236 Ill. Ed 368, 388, 925 N.E.2d 1131, 1143-44 (2010).

The Recommendation's application of the "direct and immediate requirement" to the undisputed facts is a mixed question of law and fact and is subject to the clearly erroneous standard. *Exelon Corp. v. Dep't of Revenue*, 234 Ill. 2d 266, 273, 917 N.E.2d 899, 904 (2009). A decision is clearly erroneous where, as here, the decision yields a definite and firm conviction that a mistake has been committed. *Id.*

PPG is entitled to the claimed refund because the nitrogen and hydrogen used in its float bath glass manufacturing process qualifies for the exemption for machine and equipment set out at section 3-5 of the UTA and ILL. ADMIN. CODE tit. 86, § 130.330 and printed above. It is clear that the glass underwent an observable direct and immediate physical change as a result of the nitrogen and hydrogen added to the float bath. This naturally leads to the conclusion that the nitrogen and hydrogen were catalysts. Basic physics instructs us that a change from a solid to liquid, or liquid to solid, is an immediate change upon a substance. Nothing in the statute at issue requires that the direct and immediate change relate to the chemical composition of a material and not a physical change.

The manufacturing machinery and equipment exemption applies to machinery and equipment used primarily in the manufacturing or assembling of tangible personal property for wholesale or retail sale or lease. 35 ILCS 105/3-5(18). The exemption includes chemicals that "effect a direct and immediate change upon a product being manufactured." *Id.* 3-50(4).

The Recommendation denied PPG's refund claim on the stated grounds that the nitrogen and hydrogen do not cause a "direct and immediate" change on the glass produced in the float bath.

The Recommendation did not provide a specific definition of the word "direct," as that term is used in the statute, case law, and everyday discourse. Instead, the Recommendation concluded that nitrogen and hydrogen do not effect direct changes on the glass because they do not chemically react with the glass. Both parties agree that the Recommendation's conclusion that nitrogen and hydrogen must chemically react with the glass is the "crux" of the Recommendation and the basis on which PPG's exemption was denied.

The Recommendation's conclusion that nitrogen and hydrogen must chemically react with the glass to effect a direct and immediate change to the glass is incorrect as a matter of law. The statute and regulation do not require—although they could have required—exempt chemicals to react with the final product. Rather, the question posed by Section 3-50 of the UTA and by ILL. ADMIN. CODE tit. 86, § 130.330(c) is whether nitrogen and hydrogen effect direct and immediate “changes” on the final product. This is what the nitrogen and hydrogen at issue here do. Infusion of the bath atmosphere with nitrogen and hydrogen effects direct and immediate *changes* on the glass.

Significantly, the Section 3-50 UTA and ILL. ADMIN. CODE tit. 86, § 130.330(c) expressly exempt chemicals—namely “catalysts”—that do not react with the final product. A catalyst is commonly understood as “a substance that enables a chemical reaction to proceed at a usually faster rate or under different conditions (as at a lower temperature) than otherwise possible,” but is *not* consumed or part of the final reaction. MERRIAM-WEBSTER'S COLLEGIATE DICTIONARY 193 (11th ed. 2012) (definitions of “catalyst” and “catalysis”). Here, too, nitrogen and hydrogen do not react chemically with glass, but there is no question that the direct and immediate effect of their addition to the float bath changes the glass' temperature, physical composition, and texture. This is all the exemption requires.

Although not binding on this Court, the Director has issued at least one letter ruling which confirms that chemicals may effect “direct and immediate” changes on a product without chemically reacting with the product itself. In General Information Letter No. ST-02-0223-GIL, the taxpayer used liquid nitrogen to flash-freeze frozen dinners. Ill. Dep't of Rev., Letter No. ST-02-0223 (Oct. 22, 2002). The nitrogen in Letter No. 02-0223 did not react with the food product (and, presumably, would have destroyed the product if it did). *See Id.* Rather, the nitrogen was used to cool the food so that it would remain edible and could be sold later. *Id.* The Department ruled that the cooling effect brought about by the nitrogen was a “direct and immediate change” to the food and, accordingly, the nitrogen qualified for the manufacturing exemption. *Id.* (“As a general proposition, liquid nitrogen that makes a direct and immediate change upon a product being manufactured, such as freezing the product, can qualify for the exemption.”)

Because the term “direct” is not defined in the controlling statute or regulation, it must be construed consistently with its plain, everyday meaning. *Hennings v. Chandler*, 229 Ill. 2d 18, 24, 890 N.E.2d 920, 923 (2008).

A “direct” cause of an event is commonly understood as “marked by absence of an intervening agency, instrumentality, or influence”;<sup>1</sup> “lineal”;<sup>2</sup> “having no intervening persons, conditions, or agencies; immediate”;<sup>3</sup> “without intervening factors or intermediaries.”<sup>4</sup>

<sup>1</sup> MERRIAM-WEBSTER'S COLLEGIATE DICTIONARY 353 (2012 11th ed.).

<sup>2</sup> *Id.*

<sup>3</sup> THE AMERICAN HERITAGE DICTIONARY 511 (2011 5th ed.).

<sup>4</sup> NEW OXFORD AMERICAN DICTIONARY 491 (2010 3rd ed.).

Legal dictionaries and case law equate a "direct" cause of an event with its "proximate cause." The decisions that support this proposition are legion.<sup>5</sup> The direct, or proximate, cause of a physical event on an object is, "a cause that directly produces an effect; that which in natural and continuous sequence, unbroken by any new independent cause, produces an event, and without which the [event] would not occur." BRYAN A. GARNER, *DICTIONARY OF MODERN LEGAL USAGE* 104 (1987).<sup>6</sup>

The effects of hydrogen and nitrogen on the glass are "direct" (and immediate) by any sensible definition. After infusing the float bath atmosphere with nitrogen and hydrogen, no additional steps or agencies in the manufacturing process intervene or are required to effect vital changes on the glass. The changes occur naturally and continuously, and they occur as a direct result of the addition of nitrogen and hydrogen to the bath atmosphere.

The direct and immediate changes that nitrogen effects on the glass are easy to see. As the Recommendation notes, there is "no doubt" that "gradually cooling the glass within the bath effects a direct and immediate change on the physical structure of the glass." However, the Recommendation ignores how, when, and why this "direct and immediate change" occurs. The clear and undisputed evidence established that it is the addition of nitrogen to the float bath atmosphere – with no other human or mechanical intervention – that effects what the Recommendation itself characterizes as a "direct and immediate change on the physical structure of the glass." Once nitrogen enters the bath atmosphere, the glass naturally and immediately cools in a regulated manner. The Recommendation's contrary finding is clearly erroneous and is hereby reversed.

Hydrogen, too, effects a "direct and immediate" change on the glass. As the Recommendation found, the "direct and immediate" effect of adding hydrogen to the float bath is to react with and remove oxygen from the bath atmosphere. The Recommendation also found that adding hydrogen to the bath limits the amount of "defects in the glass that are created as a result of the chemical reactions between oxygen and the other elements present in the bath atmosphere and in the bath." *Id.* However, the Recommendation found that these changes to the glass are an "indirect" effect of adding hydrogen to the bath. This finding is clearly erroneous.

<sup>5</sup> See e.g. *Babbitt v. Sweet Home Chapter of Cmty. for a Great Oregon*, 515 U.S. 687, 733 (1995) (Scalia, J., dissenting) ("In fact 'proximate' causation simply means 'direct' causation") (emphasis in original) (citing BLACK'S LAW DICTIONARY 1103 (5th ed. 1979); *Minn-Chem, Inc. v. Agrium, Inc.*, 683 F.3d 845, 857 (7th Cir. 2012), *cert. dismissed*, 134 S. Ct. 23 (U.S. 2013) ("directness is a synonym for proximate cause"); *Guillermo v. Brennan*, 691 F. Supp. 1151, 1555 n.9 (N.D. Ill. 1988); *Rooney v. Morton Salt Building, Inc.*, 19 Ill.App.3d 962, 967, 829 (Ill. App. Ct. 1974); *Southern Railway Co. v. Drake*, 107 Ill. App. 12, 23 (Ill. Ct. App. 1903) ("proximate" means "direct and immediate," and vice versa).

<sup>6</sup> Other sources define a proximate, or direct, cause, as "[t]he primary moving cause, or the predominating cause, from which the injury follows as a natural, direct, and immediate consequence, and without which it would not have occurred ... not necessarily the last cause or the act nearest to the injury, but such act as actually aided in producing the injury as a direct and efficient cause." JONATHAN S. LYNTON, *BALLENTINE'S LAW DICTIONARY* (1994).

The abundant and uncontradicted evidence demonstrates that the addition of hydrogen to the bath atmosphere directly and immediately limits the deposition of tin oxides on the surface of the glass and the migration of tin into the interior of the glass. As the undisputed expert evidence confirms, these changes to the glass occur immediately, without any additional mechanical or human intervention, and in a natural and continuous sequence.

After infusing the float bath atmosphere with nitrogen and hydrogen, no further steps or agencies in the manufacturing process intervene or are required to effect a range of vital changes on the glass. The changes occur naturally and continuously, and they occur as a direct result of the addition of nitrogen and hydrogen to the bath atmosphere. The Recommendation's findings to the contrary, all of which were adopted in the Decision, were clearly erroneous and are hereby reversed.

#### AWARD

For the reasons stated above, the Decision is REVERSED. The Department of Revenue shall issue a refund to PPG in the amount of \$329,761 plus applicable statutory interest.

ENTERED: \_\_\_\_\_

Judge Robert Lopez Cepero

**Judge Robert Lopez Cepero**

SEP 09 2014

**Circuit Court - 1627**

## State and Area Employment, Hours, and Earnings

Series Title	Employed and Office of Employment and Unemployment Statistics : Manufacturing - Manufacturing
Series ID	SMS17000003000000001
Seasonality	Seasonally Adjusted
Survey Name	State and Area Employment, Hours, and Earnings
Measure Data Type	All Employees, In Thousands
Industry	Manufacturing
Sector	Manufacturing
Area	Illinois

Year	Period	Label	Observation Value
2008	M01	2008 Jan	670.9
2008	M02	2008 Feb	668.2
2008	M03	2008 Mar	667.3
2008	M04	2008 Apr	665.2
2008	M05	2008 May	663.6
2008	M06	2008 Jun	661.8
2008	M07	2008 Jul	659.2
2008	M08	2008 Aug	656.0
2008	M09	2008 Sep	652.0
2008	M10	2008 Oct	646.6
2008	M11	2008 Nov	642.3
2008	M12	2008 Dec	631.9
2009	M01	2009 Jan	620.7
2009	M02	2009 Feb	610.7
2009	M03	2009 Mar	601.2
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2009	M05	2009 May	576.6
2009	M06	2009 Jun	569.3
2009	M07	2009 Jul	563.5
2009	M08	2009 Aug	562.2
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2009	M11	2009 Nov	556.3
2009	M12	2009 Dec	554.8
2010	M01	2010 Jan	553.8
2010	M02	2010 Feb	554.9
2010	M03	2010 Mar	555.3
2010	M04	2010 Apr	557.9
2010	M05	2010 May	559.7

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2010	M06	2010 Jun	560.5
2010	M07	2010 Jul	561.7
2010	M08	2010 Aug	563.1
2010	M09	2010 Sep	563.4
2010	M10	2010 Oct	566.0
2010	M11	2010 Nov	567.2
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2011	M03	2011 Mar	571.7
2011	M04	2011 Apr	574.1
2011	M05	2011 May	574.1
2011	M06	2011 Jun	575.0
2011	M07	2011 Jul	575.7
2011	M08	2011 Aug	575.4
2011	M09	2011 Sep	574.8
2011	M10	2011 Oct	575.5
2011	M11	2011 Nov	575.7
2011	M12	2011 Dec	576.0
2012	M01	2012 Jan	578.1
2012	M02	2012 Feb	579.5
2012	M03	2012 Mar	580.9
2012	M04	2012 Apr	582.2
2012	M05	2012 May	582.6
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2012	M10	2012 Oct	584.6
2012	M11	2012 Nov	584.1
2012	M12	2012 Dec	583.6
2013	M01	2013 Jan	583.0
2013	M02	2013 Feb	582.8
2013	M03	2013 Mar	581.7
2013	M04	2013 Apr	580.1
2013	M05	2013 May	579.3
2013	M06	2013 Jun	579.0
2013	M07	2013 Jul	577.4
2013	M08	2013 Aug	577.4
2013	M09	2013 Sep	576.0
2013	M10	2013 Oct	577.1
2013	M11	2013 Nov	577.8
2013	M12	2013 Dec	577.6
2014	M01	2014 Jan	578.7

SA-010

2014	M02	2014 Feb	578.3
2014	M03	2014 Mar	579.4
2014	M04	2014 Apr	579.6
2014	M05	2014 May	579.7
2014	M06	2014 Jun	579.7
2014	M07	2014 Jul	579.8
2014	M08	2014 Aug	579.8
2014	M09	2014 Sep	579.1
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2015	M05	2015 May	582.7
2015	M06	2015 Jun	582.7
2015	M07	2015 Jul	582.7
2015	M08	2015 Aug	582.0
2015	M09	2015 Sep	580.6
2015	M10	2015 Oct	580.2
2015	M11	2015 Nov	579.3
2015	M12	2015 Dec	578.7
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2016	M02	2016 Feb	578.0
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2016	M04	2016 Apr	576.9
2016	M05	2016 May	576.0
2016	M06	2016 Jun	574.7
2016	M07	2016 Jul	574.2
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2017	M04	2017 Apr	578.1
2017	M05	2017 May	578.1
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2017	M07	2017 Jul	576.2
2017	M08	2017 Aug	577.1
2017	M09	2017 Sep	578.2

SA-011

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2017	M11	2017 Nov	583.3
2017	M12	2017 Dec	586.0
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2018	M03	2018 Mar	586.6
2018	M04	2018 Apr	587.9
2018	M05	2018 May	587.5
2018	M06	2018 Jun	588.6
2018	M07	2018 Jul	588.7
2018	M08	2018 Aug	590.5
2018	M09	2018 Sep	593.0
2018	M10	2018 Oct	594.4
2018	M11	2018 Nov	591.5
2018	M12	2018 Dec	591.5

SA-012



## State and Area Employment, Hours, and Earnings

Series Title	Employed and Office of Employment and Unemployment Statistics : Manufacturing - Manufacturing
Series ID	SMS18000003000000001
Seasonality	Seasonally Adjusted
Survey Name	State and Area Employment, Hours, and Earnings
Measure Data Type	All Employees, In Thousands
Industry	Manufacturing
Sector	Manufacturing
Area	Indiana

Year	Period	Label	Observation Value
2008	M01	2008 Jan	542.2
2008	M02	2008 Feb	541.1
2008	M03	2008 Mar	533.6
2008	M04	2008 Apr	532.7
2008	M05	2008 May	531.5
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2009	M07	2009 Jul	426.9
2009	M08	2009 Aug	431.4
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2009	M10	2009 Oct	434.3
2009	M11	2009 Nov	436.9
2009	M12	2009 Dec	438.7
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2010	M02	2010 Feb	437.7
2010	M03	2010 Mar	440.1
2010	M04	2010 Apr	442.9
2010	M05	2010 May	446.4
2010	M06	2010 Jun	446.7
2010	M07	2010 Jul	448.9

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2010	M08	2010 Aug	448.7
2010	M09	2010 Sep	449.1
2010	M10	2010 Oct	449.9
2010	M11	2010 Nov	450.5
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2011	M04	2011 Apr	461.8
2011	M05	2011 May	461.0
2011	M06	2011 Jun	461.7
2011	M07	2011 Jul	461.7
2011	M08	2011 Aug	463.6
2011	M09	2011 Sep	465.7
2011	M10	2011 Oct	468.4
2011	M11	2011 Nov	465.1
2011	M12	2011 Dec	469.3
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2012	M02	2012 Feb	473.7
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2012	M04	2012 Apr	476.8
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2012	M07	2012 Jul	486.6
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2012	M09	2012 Sep	482.5
2012	M10	2012 Oct	483.6
2012	M11	2012 Nov	484.2
2012	M12	2012 Dec	486.0
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2013	M04	2013 Apr	488.0
2013	M05	2013 May	488.3
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2013	M12	2013 Dec	496.7
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2014	M02	2014 Feb	499.6
2014	M03	2014 Mar	501.2
2014	M04	2014 Apr	502.9
2014	M05	2014 May	504.4
2014	M06	2014 Jun	505.7

SA-014

2014	M07	2014 Jul	504.6
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2014	M09	2014 Sep	509.7
2014	M10	2014 Oct	511.5
2014	M11	2014 Nov	512.8
2014	M12	2014 Dec	514.4
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2015	M02	2015 Feb	514.7
2015	M03	2015 Mar	515.5
2015	M04	2015 Apr	515.3
2015	M05	2015 May	516.5
2015	M06	2015 Jun	517.3
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2016	M10	2016 Oct	524.0
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2017	M02	2017 Feb	528.3
2017	M03	2017 Mar	528.9
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2017	M05	2017 May	530.5
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2017	M07	2017 Jul	531.6
2017	M08	2017 Aug	530.9
2017	M09	2017 Sep	533.2
2017	M10	2017 Oct	531.6
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2017	M12	2017 Dec	532.7
2018	M01	2018 Jan	532.9
2018	M02	2018 Feb	533.9
2018	M03	2018 Mar	534.7
2018	M04	2018 Apr	535.0
2018	M05	2018 May	536.4

SA-015

124155

2018	M06	2018 Jun	537.3
2018	M07	2018 Jul	536.2
2018	M08	2018 Aug	533.4
2018	M09	2018 Sep	531.3
2018	M10	2018 Oct	531.9
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2018	M12	2018 Dec	535.8

SA-016

## Bureau of Labor Statistics

## State and Area Employment, Hours, and Earnings

Series Title	Employed and Office of Employment and Unemployment Statistics : Manufacturing - Manufacturing
Series ID	SM555000003000000001
Seasonality	Seasonally Adjusted
Survey Name	State and Area Employment, Hours, and Earnings
Measure Data Type	All Employees, in Thousands
Industry	Manufacturing
Sector	Manufacturing
Area	Wisconsin

Year	Period	Label	Observation Value
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2008	M03	2008 Mar	500.0
2008	M04	2008 Apr	498.8
2008	M05	2008 May	498.0
2008	M06	2008 Jun	497.6
2008	M07	2008 Jul	493.4
2008	M08	2008 Aug	491.0
2008	M09	2008 Sep	488.0
2008	M10	2008 Oct	486.4
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2009	M10	2009 Oct	425.8
2009	M11	2009 Nov	425.1
2009	M12	2009 Dec	424.6
2010	M01	2010 Jan	423.6
2010	M02	2010 Feb	424.6
2010	M03	2010 Mar	426.5
2010	M04	2010 Apr	427.7
2010	M05	2010 May	429.6
2010	M06	2010 Jun	430.7
2010	M07	2010 Jul	432.5

Source: Bureau of Labor Statistics

Generated on: February 28, 2013 4:04 PM

## Bureau of Labor Statistics

2010	M08	2010 Aug	433.4
2010	M09	2010 Sep	434.0
2010	M10	2010 Oct	433.8
2010	M11	2010 Nov	435.0
2010	M12	2010 Dec	436.2
2011	M01	2011 Jan	437.3
2011	M02	2011 Feb	439.4
2011	M03	2011 Mar	440.8
2011	M04	2011 Apr	444.0
2011	M05	2011 May	445.0
2011	M06	2011 Jun	444.9
2011	M07	2011 Jul	446.9
2011	M08	2011 Aug	447.8
2011	M09	2011 Sep	447.9
2011	M10	2011 Oct	447.4
2011	M11	2011 Nov	448.6
2011	M12	2011 Dec	449.9
2012	M01	2012 Jan	451.3
2012	M02	2012 Feb	452.4
2012	M03	2012 Mar	453.7
2012	M04	2012 Apr	454.7
2012	M05	2012 May	455.2
2012	M06	2012 Jun	456.9
2012	M07	2012 Jul	457.1
2012	M08	2012 Aug	456.9
2012	M09	2012 Sep	457.1
2012	M10	2012 Oct	457.5
2012	M11	2012 Nov	457.1
2012	M12	2012 Dec	457.5
2013	M01	2013 Jan	457.4
2013	M02	2013 Feb	457.6
2013	M03	2013 Mar	457.6
2013	M04	2013 Apr	456.4
2013	M05	2013 May	456.3
2013	M06	2013 Jun	457.4
2013	M07	2013 Jul	455.8
2013	M08	2013 Aug	456.7
2013	M09	2013 Sep	457.3
2013	M10	2013 Oct	458.2
2013	M11	2013 Nov	459.2
2013	M12	2013 Dec	459.4
2014	M01	2014 Jan	460.2
2014	M02	2014 Feb	460.6
2014	M03	2014 Mar	461.6
2014	M04	2014 Apr	462.9
2014	M05	2014 May	463.8
2014	M06	2014 Jun	464.5

Source: Bureau of Labor Statistics

Generated on: February 28, 2018 (SA-1018 PM)

## Bureau of Labor Statistics

2014	M07	2014 Jul	465.8
2014	M08	2014 Aug	466.4
2014	M09	2014 Sep	466.6
2014	M10	2014 Oct	467.2
2014	M11	2014 Nov	467.5
2014	M12	2014 Dec	467.9
2015	M01	2015 Jan	467.9
2015	M02	2015 Feb	468.8
2015	M03	2015 Mar	468.6
2015	M04	2015 Apr	467.7
2015	M05	2015 May	467.6
2015	M06	2015 Jun	467.5
2015	M07	2015 Jul	467.6
2015	M08	2015 Aug	466.6
2015	M09	2015 Sep	467.0
2015	M10	2015 Oct	466.6
2015	M11	2015 Nov	466.5
2015	M12	2015 Dec	466.1
2016	M01	2016 Jan	466.2
2016	M02	2016 Feb	465.7
2016	M03	2016 Mar	465.6
2016	M04	2016 Apr	465.8
2016	M05	2016 May	465.3
2016	M06	2016 Jun	464.4
2016	M07	2016 Jul	463.6
2016	M08	2016 Aug	463.5
2016	M09	2016 Sep	463.2
2016	M10	2016 Oct	464.0
2016	M11	2016 Nov	464.2
2016	M12	2016 Dec	465.2
2017	M01	2017 Jan	465.6
2017	M02	2017 Feb	466.0
2017	M03	2017 Mar	467.0
2017	M04	2017 Apr	466.6
2017	M05	2017 May	466.7
2017	M06	2017 Jun	467.1
2017	M07	2017 Jul	467.0
2017	M08	2017 Aug	467.1
2017	M09	2017 Sep	466.9
2017	M10	2017 Oct	469.9
2017	M11	2017 Nov	471.6
2017	M12	2017 Dec	472.6
2018	M01	2018 Jan	475.3
2018	M02	2018 Feb	478.1
2018	M03	2018 Mar	479.8
2018	M04	2018 Apr	480.6
2018	M05	2018 May	482.1

Source: Bureau of Labor Statistics

Generated on: February 28, 2019 (1:04 PM)

## Bureau of Labor Statistics

2018	M06	2018 Jun	485.8
2018	M07	2018 Jul	488.1
2018	M08	2018 Aug	489.2
2018	M09	2018 Sep	489.9
2018	M10	2018 Oct	490.1
2018	M11	2018 Nov	490.5
2018	M12	2018 Dec	490.4



# State and Area Employment, Hours, and Earnings

Series Title	Employed and Office of Employment and Unemployment Statistics : Manufacturing - Manufacturing
Series ID	SMS26000003000000001
Seasonality	Seasonally Adjusted
Survey Name	State and Area Employment, Hours, and Earnings
Measure Data Type	All Employees, In Thousands
Industry	Manufacturing
Sector	Manufacturing
Area	Michigan

Year	Period	Label	Observation Value
2008	M01	2008 Jan	593.1
2008	M02	2008 Feb	588.7
2008	M03	2008 Mar	579.0
2008	M04	2008 Apr	570.5
2008	M05	2008 May	566.8
2008	M06	2008 Jun	581.9
2008	M07	2008 Jul	554.0
2008	M08	2008 Aug	555.0
2008	M09	2008 Sep	550.3
2008	M10	2008 Oct	545.0
2008	M11	2008 Nov	540.3
2008	M12	2008 Dec	531.1
2009	M01	2009 Jan	466.5
2009	M02	2009 Feb	479.5
2009	M03	2009 Mar	476.8
2009	M04	2009 Apr	467.1
2009	M05	2009 May	444.5
2009	M06	2009 Jun	432.9
2009	M07	2009 Jul	438.5
2009	M08	2009 Aug	444.7
2009	M09	2009 Sep	449.1
2009	M10	2009 Oct	453.0
2009	M11	2009 Nov	450.3
2009	M12	2009 Dec	452.0
2010	M01	2010 Jan	453.4
2010	M02	2010 Feb	454.7
2010	M03	2010 Mar	455.1
2010	M04	2010 Apr	460.2
2010	M05	2010 May	463.4
2010	M06	2010 Jun	467.3
2010	M07	2010 Jul	469.0

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2010	M08	2010 Aug	460.7
2010	M09	2010 Sep	471.6
2010	M10	2010 Oct	475.8
2010	M11	2010 Nov	477.8
2010	M12	2010 Dec	480.4
2011	M01	2011 Jan	483.4
2011	M02	2011 Feb	486.7
2011	M03	2011 Mar	489.6
2011	M04	2011 Apr	497.8
2011	M05	2011 May	499.1
2011	M06	2011 Jun	500.3
2011	M07	2011 Jul	501.9
2011	M08	2011 Aug	506.0
2011	M09	2011 Sep	508.9
2011	M10	2011 Oct	512.8
2011	M11	2011 Nov	514.7
2011	M12	2011 Dec	518.8
2012	M01	2012 Jan	520.6
2012	M02	2012 Feb	522.2
2012	M03	2012 Mar	525.3
2012	M04	2012 Apr	526.4
2012	M05	2012 May	528.1
2012	M06	2012 Jun	529.3
2012	M07	2012 Jul	535.0
2012	M08	2012 Aug	533.0
2012	M09	2012 Sep	534.1
2012	M10	2012 Oct	535.5
2012	M11	2012 Nov	534.6
2012	M12	2012 Dec	538.5
2013	M01	2013 Jan	537.8
2013	M02	2013 Feb	541.5
2013	M03	2013 Mar	544.9
2013	M04	2013 Apr	544.0
2013	M05	2013 May	545.6
2013	M06	2013 Jun	547.7
2013	M07	2013 Jul	543.4
2013	M08	2013 Aug	551.0
2013	M09	2013 Sep	554.1
2013	M10	2013 Oct	557.1
2013	M11	2013 Nov	557.8
2013	M12	2013 Dec	556.3
2014	M01	2014 Jan	555.9
2014	M02	2014 Feb	565.4
2014	M03	2014 Mar	567.5
2014	M04	2014 Apr	568.6
2014	M05	2014 May	572.5
2014	M06	2014 Jun	580.3

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2014	M07	2014 Jul	579.3
2014	M08	2014 Aug	579.5
2014	M09	2014 Sep	575.0
2014	M10	2014 Oct	578.4
2014	M11	2014 Nov	581.6
2014	M12	2014 Dec	587.1
2015	M01	2015 Jan	583.4
2015	M02	2015 Feb	585.0
2015	M03	2015 Mar	585.2
2015	M04	2015 Apr	586.3
2015	M05	2015 May	588.9
2015	M06	2015 Jun	590.8
2015	M07	2015 Jul	593.1
2015	M08	2015 Aug	593.7
2015	M09	2015 Sep	595.8
2015	M10	2015 Oct	594.7
2015	M11	2015 Nov	595.7
2015	M12	2015 Dec	597.9
2016	M01	2016 Jan	601.4
2016	M02	2016 Feb	600.0
2016	M03	2016 Mar	599.9
2016	M04	2016 Apr	606.1
2016	M05	2016 May	601.8
2016	M06	2016 Jun	605.1
2016	M07	2016 Jul	606.1
2016	M08	2016 Aug	602.2
2016	M09	2016 Sep	605.7
2016	M10	2016 Oct	606.2
2016	M11	2016 Nov	609.5
2016	M12	2016 Dec	611.0
2017	M01	2017 Jan	614.4
2017	M02	2017 Feb	614.9
2017	M03	2017 Mar	615.1
2017	M04	2017 Apr	616.2
2017	M05	2017 May	615.4
2017	M06	2017 Jun	615.5
2017	M07	2017 Jul	607.2
2017	M08	2017 Aug	615.3
2017	M09	2017 Sep	613.2
2017	M10	2017 Oct	615.2
2017	M11	2017 Nov	616.4
2017	M12	2017 Dec	617.8
2018	M01	2018 Jan	615.4
2018	M02	2018 Feb	617.4
2018	M03	2018 Mar	618.1
2018	M04	2018 Apr	617.8
2018	M05	2018 May	619.5

SA-023

124155

2018	M06	2018 Jun	621.3
2018	M07	2018 Jul	622.7
2018	M08	2018 Aug	623.4
2018	M09	2018 Sep	623.7
2018	M10	2018 Oct	625.4
2018	M11	2018 Nov	624.2
2018	M12	2018 Dec	625.3

**SA-024**

No. 124155

**In the Supreme Court of Illinois**

HORSEHEAD CORPORATION,	)	Appeal from the Illinois Appellate
	)	Court, First District, First Division
Appellant-Petitioner,	)	No. 1-17-2802
	)	
v.	)	There on Appeal
	)	from the Illinois Independent Tax Tribunal,
	)	No. 14-TT-227
ILLINOIS DEPARTMENT OF REVENUE	)	
and ILLINOIS INDEPENDENT TAX	)	Chief Administrative Law Judge
TRIBUNAL,	)	James M. Conway, Presiding
	)	
Appellees-Respondents.	)	

**NOTICE OF FILING OF HORSEHEAD CORPORATION'S**  
**BRIEF OF APPELLANT-PETITIONER HORSEHEAD CORPORATION**

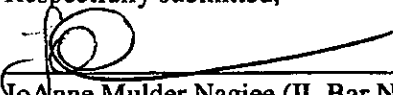
To: See Attached Certificate of Service

PLEASE TAKE NOTICE that on March 7, 2019, Appellant-Petitioner, HORSEHEAD CORPORATION (now known as American Zinc Recycling Corp.), filed electronically through Odyssey File & Serve Horsehead Corporation's Brief Of Appellant-Petitioner Horsehead Corporation, a copy of which is attached.

Dated: March 7, 2019

Respectfully submitted,

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 Attorneys for Appellant-Petitioner

E-FILED  
 3/7/2019 5:45 PM  
 Carolyn Taft Grosboll  
 SUPREME COURT CLERK

**CERTIFICATE OF FILING/SERVICE**

I, JoAnne Mulder Nagjee, an attorney, certify under penalty of law as provided in 735 ILCS 5/1-109 (2014), that on March 7, 2019, the NOTICE OF FILING OF HORSEHEAD CORPORATION'S BRIEF OF APPELLANT-PETITIONER HORSEHEAD CORPORATION and HORSEHEAD CORPORATION'S BRIEF OF APPELLANT-PETITIONER HORSEHEAD CORPORATION were filed with the Supreme Court of Illinois through its e-filing system and served upon the following via electronic mail:

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 Assistant Attorney General, State of Illinois  
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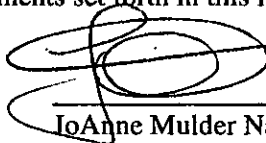
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*Counsel for Appellee-Respondent Illinois Department of Revenue*

and

Illinois Independent Tax Tribunal  
 160 North LaSalle Street, Room N506  
 Chicago, Illinois 60601  
 ITT.TaxTribunal@illinois.gov.

Under penalties as provided by law pursuant to Section 1-109 of the Code of Civil Procedure, I certify that the statements set forth in this instrument are true and correct.

  
 JoAnne Mulder Nagjee (No. 6298588)

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 3/7/2019 5:45 PM  
 Carolyn Taft Grosboll  
 SUPREME COURT CLERK