

# KELLY HART

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December 28, 2015

Office of Chief Clerk  
Attn: Agenda Docket Clerk – MC 105  
Texas Commission on Environmental Quality  
P.O. Box 13087  
Austin, Texas 78711-3087

Re: Docket No. 2015-1528-IWD; Formosa Plastics Corporation, Texas and Formosa Utility Venture, Ltd.; Applicant's Response to Requests for Hearing on Permit No. WQ0002436-000

Dear Chief Clerk:

Pursuant to instructions in the TCEQ letter of December 16, 2015, Formosa Plastics Corporation, Texas and Formosa Utility Venture, Ltd. (jointly, "Formosa" or "Applicant") file this response to the September 18, 2015 request for contested case hearing filed by the Union of Commercial Oystermen of Texas, Texas Injured Workers, and San Antonio Bay Water Keeper (collectively, "Protestants"). For the reasons set forth below, the Protestants have not raised any disputed issues of fact that are relevant and material to TCEQ's decision on the application. As further described below, the three Protestant groups have not properly identified one or more members who have standing to request a hearing in their own right. For the reasons stated herein, Formosa respectfully requests that the TCEQ commissioners deny all hearing requests.

**I. Protestants have not shown that individual members of each Protestant group or association are "affected persons" in their own right.**

Under TCEQ rules, a group or association may request a contested case hearing only if one or more members of the group or association would otherwise have standing to request a hearing in their own right.<sup>1</sup> In determining whether a person is an affected person, at least the following factors must be considered: (1) whether the interest claimed by the person is one protected by law under which the application will be considered; (2) distance restrictions or other limitations imposed by law on the person's affected interest; (3) whether a reasonable relationship exists between the person's interest claimed and the activity regulated; (4) the likely impact of the regulated activity on the health and safety of the person and on the use of the property of the person; and (5) the likely impact of the regulated activity on use of the impacted natural resource by the person.<sup>2</sup> Furthermore, a hearing request must identify the person's

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<sup>1</sup> 30 TAC § 55.205(a)(1).

<sup>2</sup> 30 TAC § 55.203(c)(1) – (5).

personal justiciable interest affected by the application including a specific written statement explaining the person's location and distance relative to the proposed facility or activity and how and why the person believes he or she will be adversely affected by the proposed facility or activity in a manner not common to members of the general public.<sup>3</sup>

In this case, the Protestants' hearing request has merely listed a few members of the three Protestant groups with a residential address in the cities of Port Lavaca or Seadrift, but there is no showing of the required "affected person" elements for each identified member as required by TCEQ rules. A bare allegation that the three Protestant groups have members "who own property, reside, work, and recreate near Formosa's facility and its discharges" is wholly insufficient to show that each listed member has standing to request a hearing in their own right.<sup>4</sup> Moreover, there is no "specific written statement explaining in plain language" the group member's distance relative to the proposed facility or activity nor why "he or she will be adversely affected by the proposed facility or activity in a manner not common to members of the general public."<sup>5</sup>

While it may be possible to plot out the location of each listed group member's residential address on a map and then to determine the distance of each listed group member's residence from the Formosa facility, the Protestants' hearing request does not do that. Therefore there is no way to determine from the hearing request whether a listed group member's residence is one mile or 20 miles from the Formosa facility.<sup>6</sup> More significantly, there is no way to determine from the hearing request whether each listed group member has standing to request a hearing in their own right. Not only is there no discussion of the five factors required to be evaluated under 30 TAC § 55.203(c) for each listed group member, there is no discussion in even a general sense of whether, or how, or to what extent, each listed group member will be personally affected by the proposed permit amendment.

For example, the hearing request for the Union of Commercial Oystermen of Texas sheds no light at all on whether Mauricio Blanco is an actual commercial shrimper or oysterman who works in or around Lavaca/Chocolate Bay, or whether he uses Lavaca/Chocolate Bay for recreational purposes. Similarly, the hearing request for Texas Injured Workers sheds no light at all on whether or to what extent Dale Jurasek's health and safety or his recreational opportunities will be affected by the permitted discharges. Similarly, the hearing request for San Antonio Bay Water Keeper has no information at all on how David and Christi Campos' use and enjoyment of Lavaca/Chocolate Bay are affected by Formosa's wastewater discharges. These as well as the other listed factors in 30 TAC § 55.203(c) for determining an "affected person" are required to

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<sup>3</sup> 30 TAC § 55.201(d)(2).

<sup>4</sup> See, 30 TAC § 55.205(a)(1).

<sup>5</sup> See, 30 TAC § 55.201(d)(2).

<sup>6</sup> Google Map appears to show that downtown Port Lavaca is about 8 miles from the Formosa facility and that Seadrift is about 24 miles from the Formosa facility.

be evaluated, yet there is nothing in the hearing request evaluating or even addressing these factors.

TCEQ rules are clear in requiring that a hearing request by a group or association show that at least one member is an “affected person” in their own right, yet none of three groups requesting a hearing in this case have made that showing. Therefore, the hearing requests for all three groups should be denied on that ground alone.

**II. Protestants have not raised any disputed issues of fact that are relevant and material to TCEQ’s decision on the application.**

Although the following issues were raised in the Protestants’ September 18, 2015 request for hearing, for the reasons stated below, none of the asserted reasons for holding a contested case hearing constitute a disputed issue of fact that is relevant and material to the TCEQ’s decision on the application. Therefore, there are no substantive grounds for a contested case hearing for the subject permit application.

**1. Increased copper discharges in the draft permit as alleged violations of anti-backsliding provisions of the Clean Water Act and an alleged threat to aquatic species.**

The Protestants assert that the draft permit’s increase of copper of one-tenth of a pound per day (from 1.37 lbs/day to 1.47 lbs/day) in Formosa’s allowable wastewater discharge would violate the “anti-backsliding” prohibition in 40 CFR § 122.44(l). To the contrary, however, the anti-backsliding prohibition is subject to various exceptions, one of which is where material and substantial alterations or additions to the permitted facility occurred after permit issuance which justify the application of a less stringent effluent limitation.<sup>7</sup> As noted by the Executive Director (“E.D.”), Formosa’s application states that past and pending process changes include new and modified manufacturing processes that affect the copper content of the discharged wastewater.<sup>8</sup> As described in the affidavit attached hereto as Exhibit 1, over the years Formosa has conducted various process “de-bottleneck” projects to increase production (e.g., chlor-alkali production increase of 25%) and has also constructed new units (e.g., the SPVC unit; the CFB unit) all of which result in the need for greater allowable copper discharges. These production process changes fit squarely within the exception for “material and substantial alterations or additions to the permitted facility” that the anti-backsliding exception was intended to address.

In noting that these facility changes have already occurred, the Protestants make the unwarranted assumption that the increased copper discharges have already been occurring in violation of Formosa’s existing permit. To the contrary however, the E.D. notes that “Formosa

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<sup>7</sup> 40 CFR § 122.44(l)(2)(i)(A).

<sup>8</sup> E.D.’s Response to Public Comments at pg. 15.

has historically maintained compliance with the mass effluent limitations in its existing permit”.<sup>9</sup> Further as stated in the affidavit attached as Exhibit 1, although Formosa has added new production units and increased production, its monitored discharged concentration of copper has remained the same at approximately 20 parts per billion. Nevertheless, because of the facility changes, it will soon be infeasible for Formosa to meet the mass effluent limitations for copper in the existing permit on a consistent basis,<sup>10</sup> and thus the increase in permitted copper discharges is needed and justified. The Protestants are simply wrong in claiming that violations of the existing copper discharge limit are already occurring since Formosa has had no violations of its copper mass limits, except on only two occasions within the last five years.

The Protestants further assert that the increased amount of copper discharges under the draft permit increases the risk of damage to aquatic species and violates state water quality standards. However, the E.D. notes that the draft permit’s copper limits were determined from water quality-based effluent limitations which are more stringent than the required technology-based effluent limitations.<sup>11</sup> Basing the permitted copper discharge limits on technology-based effluent limitations results in a daily average discharge limit of 4.72 lbs/day and a daily maximum limit of 11.01 lbs/day, but basing the copper limit on water quality-based effluent limitations as was done for the draft permit results in much more stringent copper limits of 1.47 lbs/day and 3.11 lbs/day respectively.<sup>12</sup> Thus, the E.D. concluded that the copper limits comply with the state water quality standards and the applicable water quality management plan and will maintain and protect existing instream uses of “exceptional aquatic life use”, “contact recreation”, and “oyster waters”.<sup>13</sup> The E.D.’s use of the more stringent water quality-based effluent limitations to establish the permitted copper limits shows that the Protestants’ concern for harm to aquatic species is completely unwarranted.

The Protestants also assert that the synergistic effects of the Formosa copper discharges in combination with mercury contamination known to exist in Lavaca Bay could harm aquatic species and wildlife that feed on aquatic species. However, as noted by the E.D., the potential synergistic effects of copper and mercury are addressed in the safety factors that are applied when calculating the water quality criteria for protection of human health and aquatic life.<sup>14</sup> These safety factors result in more stringent EPA-approved discharge limits that account for unknown variables such as synergistic effects.<sup>15</sup> Moreover, the short-term and long-term effluent toxicity biomonitoring that Formosa conducts pursuant to the permit acts as a real-world verification that the effluent discharge does not harm aquatic species.<sup>16</sup>

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<sup>9</sup> *Id.*

<sup>10</sup> *Id.*

<sup>11</sup> E.D.’s Response to Public Comments at pg. 16.

<sup>12</sup> *Id.*

<sup>13</sup> *Id.*

<sup>14</sup> E.D.’s Response to Public Comments at pg. 18.

<sup>15</sup> E.D.’s Response to Public Comments at pg. 19.

<sup>16</sup> *Id.*

Based on the above, it is clear that the Protestants' concern about the increased discharge limit for copper is not a disputed issue of fact that is material to TCEQ's decision on the application. Rather than being an "issue of fact", the question of whether the draft permit copper limit violates the anti-backsliding prohibition of 40 CFR §122.44(I) appears to be a question of law. Therefore there is no valid reason to hold a contested case hearing on this issue.

Likewise, the E.D. correctly stated that there is no legal basis to require concentration limits in addition to mass limits on copper. Again, this is a question of law that does not serve as a basis for a contested case hearing.

**2. Increased chloroform discharges in the draft permit as alleged violations of anti-backsliding provisions of the Clean Water Act and an alleged threat to aquatic species.**

The Protestants also assert that increased permit limit for chloroform (an increase in daily average discharge from 0.55 lbs/day to 1.89 lbs/day) violates the anti-backsliding prohibition in 40 CFR § 122.44(I). To the contrary however, the chloroform discharge limit was increased based on recent analytical testing showing that cooling tower blowdown and the chlor-alkali process are contributing sources for chloroform that were not considered when the existing permit limit was established.<sup>17</sup>

Formosa has two internal outfalls that combine into Outfall 001 which discharges to Lavaca Bay. Internal Outfall 101 accounts for all organic streams and has a chloroform limit in the existing permit. Internal Outfall 201 accounts for all inorganic streams and does not have a chloroform limit in the existing permit. Formosa is attempting to recycle more wastewater, some of which will be processed with the inorganic streams (discharged at internal Outfall 201). Because prior to its last use, some of this wastewater previously came in contact with chlorine, Outfall 201 had to be tested for chloroform. As a result of this testing, Formosa discovered that chlorine used in the cooling tower as a bacteria inhibitor creates chloroform as a byproduct and that chlorine residual present in the chlor-alkali stream also creates chloroform.<sup>18</sup> Therefore, the draft permit needs to account for the chloroform in internal Outfall 201 caused by the recycling of wastewater. The new chloroform limit (monitored as Outfall SUM) takes into account chloroform at internal Outfall 201 as well as internal Outfall 101 whose limits will be applied at internal Outfall SUM.

As stated by the E.D., the chloroform in internal Outfall 201 resulting from recycling of wastewater is new information which was not available at the time of permit issuance and thus meets another of the exceptions to the general anti-backsliding requirement.<sup>19</sup> Even more significantly, the draft permit limits for chloroform at internal Outfall SUM were increased to

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<sup>17</sup> E.D.'s Response to Public Comments at pg. 35; E.D.'s Fact Sheet, Sec. IX.A.3.

<sup>18</sup> See Affidavit of Chad Lee attached as Exhibit 1.

<sup>19</sup> 40 CFR § 122.44(I)(2)(i)(B).

levels that are significantly less than the calculated water quality-based effluent limitations at Outfall 001 and such increase is, therefore, well within the allowable levels for water quality protection.<sup>20</sup>

Based on the above, it is clear that the Protestants' concern about the increased discharge limit for chloroform is not a disputed issue of fact that is material to TCEQ's decision on the application. Rather than being an "issue of fact", the question of whether the draft permit chloroform limit violates the anti-backsliding prohibition of 40 CFR §122.44(l) appears to be a question of law. Therefore there is no valid reason to hold a contested case hearing on this issue.

**3. Three-year compliance period for dioxin and furans as an alleged abuse of discretion by TCEQ and a violation of the Clean Water Act.**

The Protestants argue that the draft permit's allowance of three years for Formosa to comply with the new, more stringent dioxin and furans discharge limit is an abuse of the E.D.'s discretion in establishing a permit compliance schedule. The Protestants acknowledge that TCEQ rules allow for a three-year compliance period to achieve new effluent limits, but they believe the need for the compliance period is not justified in view of the length of time the renewal permit has been administratively continued during the permit review process.

However, as noted by the E.D., a compliance period allows permittees the time necessary to determine how they are going to meet the new effluent limit and to install new treatment equipment.<sup>21</sup> The E.D. notes that Formosa will need time to evaluate potential source control options and wastewater treatment options to meet the final effluent limit for dioxins and furans, and after the new treatment method is selected, they will have to be implemented and incorporated into Formosa's production processes.<sup>22</sup> This is a very complex and time consuming process which cannot be substantially begun until the final terms and conditions of the permit are known. Thus, the fact that the permit has been administratively continued during the TCEQ's permit review process is irrelevant to whether the E.D. may in his discretion allow a three-year compliance period as authorized under TCEQ rules.

Finally, it is important to note that Formosa samples for dioxins and furans every quarter and for the past ten years all results have been non-detect. Operationally, Formosa never expects to have dioxins or furans in its wastewater discharge and any detection of these constituents would indicate that there was an upset within one of the units which would immediately be addressed.

Based on the above, it is clear that the Protestants' concern about the three-year compliance period for dioxins and furans is not a disputed issue of fact that is material to

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<sup>20</sup> E.D.'s Response to Public Comments at pg. 21.

<sup>21</sup> E.D.'s Response to Public Comments at pg. 36.

<sup>22</sup> *Id.*

TCEQ's decision on the application. Rather than being an "issue of fact", this issue is merely one of whether the E.D. properly exercised his discretion in granting the three-year compliance period; there is no dispute about the fact that the E.D. has such discretion. Therefore there is no valid reason to hold a contested case hearing on this issue.

**4. Alleged degradation of Segments 2453, 2454, Cox Lake and Cox Bay, Lavaca Bay/Chocolate Bay in violation of Clean Water Act.**

The Protestants generally argue that Formosa should be required to demonstrate that its wastewater discharges will not harm the receiving waters' designated uses for aquatic life. In response to this merely generalized concern of the Protestants, the E.D. provided a detailed explanation of how TCEQ's Tier 1 anti-degradation review determined that numerical and narrative water quality criteria to protect existing uses will be maintained and protected.<sup>23</sup> TCEQ's Tier 2 review determined that there would be no significant degradation of water quality in Cox Lake, Cox Bay, or Lavaca Bay/Chocolate Bay for which the designated uses are contact recreation, oyster waters and exceptional aquatic life use.<sup>24</sup> The E.D. further explained that the Texas Surface Water Quality Standards are implemented through technology-based or water-quality based effluent limitations to ensure that no wastewater source is allowed to discharge wastewater that (1) results in instream aquatic toxicity; (2) causes a violation of an applicable narrative or numerical state water quality standard; (3) results in endangerment of a drinking water supply; or (4) results in aquatic bioaccumulation that threatens human health.<sup>25</sup>

It is important to note that the draft permit does not authorize an increase in the volume of effluent that Formosa would be authorized to discharge as the volume of discharge under both the existing and draft permits is limited to 9.7 million gallons per day ("MGD") on a daily average basis and 15.1 MGD on a daily maximum basis via Outfall 001.<sup>26</sup> The permitted discharges via Outfalls 002 through 012 predominantly consist of stormwater on an intermittent and flow-variable basis.<sup>27</sup> Moreover, except for total copper at Outfall 001 and chloroform at Outfall SUM (a summation of internal Outfalls 101 and 201), there are no increases in pollutant loadings being authorized in the draft permit.<sup>28</sup>

Moreover, as indicated in the Exhibit 1 affidavit, Formosa has been performing an extensive Receiving Water Monitoring program on a quarterly basis since September 1993 using a TCEQ approved Scope of Work. The data that has been collected over the years indicates no negative impact to Lavaca Bay. Additionally, this data is submitted to the TCEQ each year as a part of the annual report requirement.

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<sup>23</sup> E.D.'s Response to Public Comments at pg. 26.

<sup>24</sup> *Id.*

<sup>25</sup> *Id.*

<sup>26</sup> E.D.'s Response to Public Comments at pg. 21.

<sup>27</sup> *Id.*

<sup>28</sup> *Id.*

The Protestants have expressed only a generalized concern for potential degradation of the receiving waters, but they have not alleged any specific factual issue about how the E.D. conducted its Tier 1 and Tier 2 anti-degradation reviews, or how the E.D. calculated the technology-based or water quality-based effluent limitations contained in the draft permit. Thus, there is no alleged factual basis for the concerns expressed by Protestants about potential degradation of the receiving waters. Based on the Protestants' merely generalized concern for potential degradation of the receiving waters, no relevant and material issue of fact has been raised concerning degradation of the receiving waters and there is no valid reason to hold a contested case hearing on this issue.

**5. Alleged inaccurate TCEQ determination of Formosa's compliance history.**

The Protestants assert that the E.D. incorrectly determined Formosa's compliance history because a "Satisfactory" compliance history was determined for both permit applicants (Formosa Utility Venture, Ltd. and Formosa Plastics Corporation, Texas) rather than for a single Formosa entity and because the compliance history may not have included inspections occurring following Formosa's filing of its permit renewal application.

However, the E.D. notes that the compliance history was determined in complete accord with TCEQ rule requirements.<sup>29</sup> There are two applicant entities for this permit and so under TCEQ rules, a compliance history must be determined for each applicant entity which is what the E.D. did. To artificially construct a single compliance history for a single fictional Formosa entity as requested by the Protestants is not authorized by TCEQ rules.

Moreover, TCEQ rules are clear in defining the 5-year compliance period as the five years preceding the filing of a permit application and the E.D. has complied with TCEQ rule on this matter. Although TCEQ rules allow the E.D. to extend the compliance review period up through completion of review of the application, this is a matter within the discretion of the E.D. The fact that the E.D. has chosen not to exercise his discretion in this regard does not make this a relevant and material issue of fact. Therefore there is no valid reason to hold a contested case hearing on whether the E.D. should have exercised his discretion one way or the other.

**6. Alleged need for more specific permit standards to prevent LLDPE pellets and PVC dust from being discharged.**

The Protestants contend that specific permit conditions are needed to expressly prohibit the discharge of LLDPE (polyethylene) pellets and PVC dust in light of documented instances in the past where such pellets and dust were exposed to potential stormwater runoff into the receiving waters. As noted by the E.D., the draft permit already prohibits the discharge of floating debris and suspended solids via the permitted outfalls.<sup>30</sup> TCEQ rules at 30 TAC §

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<sup>29</sup> E.D.'s Response to Public Comments at pgs. 23 - 25.

<sup>30</sup> E.D.'s Response to Public Comments at pg. 7.

307.4(b)(2) prohibit the discharge of “floating debris and suspended solids” into surface waters and this rule is incorporated by reference into the permit.

This permit prohibition does not make it a permit violation for some polyethylene pellets or PVC dust to accumulate within the internal boundaries of the plant as unavoidably happens when billions of tiny polyethylene pellets are produced and are transferred from one materials handling unit to another. In the event some polyethylene pellets and PVC dust becomes entrained in stormwater runoff and is discharged into Lavaca Bay via one of the outfalls, then this would indisputably be a permit violation which must be reported to TCEQ within 24 hours. However, the Protestants have not asserted a justification for a permit provision to expressly designate polyethylene pellets or PVC dust as materials that are included within the term “floating debris and suspended solids”. Nor have the Protestants asserted a justification for a permit provision expressly requiring reporting of such a violation within 24 hours when such a requirement already exists. As with any reported violation, the permit requires that the permittee notify TCEQ of, among other things, the steps the permittee has taken or planned to prevent a recurrence of the violation and to mitigate any adverse effects. Therefore, there is simply no need for the duplicative permit provisions requested by the Protestants.

Moreover as indicated in the affidavit attached as Exhibit 1, Formosa employs a facility wide Total Housekeeping Management (“THM”) Program which essentially is a routine cleaning program. Specific to pellets and dust, personnel sweep up all process and loading areas. Storm water conveyances and structures, including permitted Outfalls are routinely cleaned to remove pellets and debris. Also, each structure and permitted Outfall is inspected once per shift for floating debris, and the permitted Outfalls are checked prior to gate openings.

Essentially it is a matter within the discretion of the E.D. as to whether there should be a permit provision expressly stating that the terms “floating debris” or “suspended solids” include polyethylene pellets and PVC dust. The fact that the E.D. has chosen not to exercise his discretion in this regard does not make this a relevant and material issue of fact. Therefore there is no valid reason to hold a contested case hearing on whether the E.D. should have exercised his discretion to include the permit provisions as requested by the Protestants.

**7. Alleged need for TCEQ to formally consult with U.S. Fish & Wildlife Service regarding the effect on endangered species of permitted discharges.**

The Protestants assert that the TCEQ has failed in a legal duty to consult with the U.S. Fish & Wildlife Service (“USFWS”) regarding the potential for harm to endangered and threatened wildlife species resulting from Formosa’s proposed wastewater discharge under the draft permit. To the contrary however, the E.D. sent two notices of the proposed permit (the notice of application and the notice of preliminary decision) to the USFWS and the Texas Parks and Wildlife Department (“TPWD”) yet neither agency responded with any comments. For both agencies with jurisdiction over threatened and endangered species at the federal and state level to not express any concerns about Formosa’s wastewater discharge demonstrates that there will be

no significant impacts on endangered species. Moreover, as noted by the E.D., the USFWS and TPWD were invited to submit comments on the proposed water quality rules under which Formosa's permit application is being processed.

It is clear that both USFWS and TPWD have been consulted and given every opportunity to express concerns over TCEQ's wastewater permitting in this case. There is no factual basis for the Protestants' allegations about a failure to consult with USFWS on endangered species impacts. Therefore, the Protestants have failed to raise a material issue of fact and there is no basis for holding a contested case hearing on this issue.

#### **8. Alleged need for a Toxicity Reduction Evaluation.**

The Protestants assert that any permit issued to Formosa should require a Toxicity Reduction Evaluation ("TRE") if there are two toxic biomonitoring events within a period of two months rather than the draft permit's requirement for a TRE after "multiple toxic events". Under normal TPDES permitting procedures a TRE is required if needed to determine the cause and source of toxicity in the effluent. If the TRE cannot identify the toxicant, then a whole effluent toxicity ("WET") limit is added to a wastewater discharge permit. But in this case, the draft permit already includes WET limits for both test aquatic species (mysid shrimp and inland silverside).<sup>31</sup> The E.D. further notes that "the effluent from the Formosa facility has not demonstrated significant toxicity in any chronic test for at least the past nine years" and therefore the E.D. determined that the permitted WET limit ensures that aquatic life within Lavaca Bay will be protected.<sup>32</sup>

Based on the above, the Protestants' request for a permit condition requiring a TRE following two toxicity events is superfluous because Formosa already has passed the stage of conducting a TRE and is operating under WET limits. Moreover under the WET testing protocol, there has been no toxicity shown in any chronic test events for the past nine years. Accordingly, the Protestants have failed to raise a material issue of fact regarding the need for a revised TRE permit provision and there is no basis for holding a contested case hearing on this issue.

#### **9. Alleged need for Formosa to be subject to New Source Performance Standards.**

The Protestants contend that the E.D. has misclassified the Formosa site as an "existing site" under the EPA's New Source Performance Standards ("NSPS") rather than as a "new site" due to certain facility expansions made by Formosa in 1994 and 2001. Accordingly, the Protestants assert that the E.D. should evaluate the Formosa plant additions under the applicable NSPS. However, the E.D. has determined that not only are the NSPS inapplicable to Formosa, even if they were applicable, there would be no changes in the draft permit's effluent

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<sup>31</sup> E.D.'s Response to Public Comments at pg. 57.

<sup>32</sup> *Id.*

limitations.<sup>33</sup> This is because the NSPS criteria are identical to the best currently available practicable control technology (“BPT”) criteria for the respective effluent guidelines that were applied in the draft permit.<sup>34</sup>

The E.D. determined that Formosa is an existing source because the Vinyl Chloride Monomer plant was constructed in 1982 prior to the proposal of the NSPS in 1983.<sup>35</sup> The facility expansions made by Formosa in 1994 and 2001 are considered new dischargers not a new source based on the regulatory definitions of “new source” and “new discharger”.<sup>36</sup>

In arguing that Formosa is a “new source” under the regulatory definitions, it is clear that the Protestants’ are raising a legal issue, not a relevant and material issue of fact. Moreover, there is no harm or impact to Protestants of not applying the NSPS because the criteria for NSPS are identical to the respective BPT criteria for the applicable effluent guidelines at 40 CFR Part 414, Subparts D and F used in the draft permit.<sup>37</sup> Therefore, there is no basis for holding a contested case hearing on this issue.

**10. Alleged need to document and evaluate whether stricter discharge limits are proper for effluent limits based on Best Professional Judgment.**

In its request for hearing, the Protestants assert for the first time that the technology-based effluent limits established in the draft permit may not have adequately considered best available technology (“BAT”) because the E.D.’s process for BAT was not clearly documented. Therefore, the Protestants are requesting that each pollutant regulated in the draft permit be re-evaluated to clearly document “the process used and materials considered” in reaching the E.D.’s determination. To the contrary however, the E.D.’s Fact Sheet provides a great deal of detail on how the E.D. calculated technology-based effluent limitations. See Pages 20 through 26 of the Fact Sheet and Appendix A (pages 38 through 42 of the Fact Sheet) for calculations and equations used by the E.D. in making these determinations.

Moreover, because Protestants did not make this comment during the comment period, they are precluded from doing so now.<sup>38</sup>

In addition, as discussed in the attached affidavit, Formosa’s wastewater unit presently constitutes BAT. For example, Formosa maintains round-the-clock manned operations, takes numerous analytical samples to monitor quality, employs real-time data using a distributive control monitoring system, and continuously makes adjustments to maintain discharge quality.

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<sup>33</sup> E.D.’s Response to Public Comments at pg. 31.

<sup>34</sup> *Id.*

<sup>35</sup> *Id.*

<sup>36</sup> *Id.*

<sup>37</sup> E.D.’s Response to Public Comments at pg. 32.

<sup>38</sup> 30 TAC § 55.201(d)(4).

The Protestants have not cited or taken issue with any factual aspect of how the E.D. determined or applied BAT. The objection of the Protestants to the E.D.'s BAT determinations for each regulated pollutant is therefore too generalized to constitute a relevant and material issue of fact that is appropriate for a contested case hearing. Moreover, the objection was not timely made.

**11. Alleged need to report pH and temperature excursions within 24 hours with monitoring of resulting damage.**

The Protestants contend that the draft permit is not clear in how the 24-hour reporting requirement applies to pH and temperature excursions in light of the permit provision allowing for minor fluctuations above the specified temperature and pH limit so long as the exceedence does not occur more than 7 hours and 26 minutes in any calendar month and the individual excursion does not last more than 60 minutes. However, as noted by the E.D., this permit provision (Other Requirements provision No. 10) is simply a carry-over provision from the existing permit and is typically included in TPDES permits that have temperature limits with a continuous monitoring requirement.<sup>39</sup> This provision is also based on federal regulations regarding acceptable excursions for pH limits when continuous monitoring is required in a NPDES permit.<sup>40</sup> The total time of allowed excursion (7 hours and 26 minutes in any calendar month) is only about one percent of the monthly reporting period time frame and is considered to be within the statistical limits of acceptable variability.<sup>41</sup>

Therefore, it appears that the protestants have simply raised a question about how this permit provision relates to the 24-hour violation reporting requirement, but the Protestants have not raised a relevant and material issue of fact that is appropriate for a contested case hearing.

**12. Alleged need for the permit to require all monitoring samples and measurements be representative of the monitored activity.**

The Protestants assert that monitoring of all regulated waste streams for compliance with effluent limitation guidelines must be performed prior to mixing with any other unregulated waste streams, otherwise the monitored effluent would not be "representative of the monitored activity". To the contrary however, the effluent from Outfalls 101 and 201 are required by the draft permit to be monitored prior to being commingled with other wastewaters. See page 2d of the draft permit which states that effluent monitoring samples shall be taken at Outfall 101 at the exit of the final treatment unit of the Combined Waste Treatment Plant – Biological Treatment unit "prior to commingling with any other wastewaters". Similarly, see page 2g of the draft permit which states that effluent monitoring samples shall be taken at Outfall 201 where authorized wastewaters commingle at the exit of their respective final treatment units of the

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<sup>39</sup> E.D.'s Response to Public Comments at pg. 33.

<sup>40</sup> E.D.'s Response to Public Comments at pg. 34.

<sup>41</sup> E.D.'s Response to Public Comments at pg. 33.

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Combined Waste Treatment Plant – Physical Treatment unit “prior to commingling with any other wastewaters”.

Therefore, the Protestants are mistaken in thinking that the draft permit allows for monitoring of regulated pollutants only following commingling with other wastewaters and this mistaken concern does not constitute a material issue of fact that is appropriate for a contested case hearing.

**13. Alleged need for proper test procedures to be included in the draft permit.**

The Protestants assert that the draft permit’s “Test Procedures” provision (Monitoring and Reporting Requirements provision 2 on page 4 of the draft permit) must include a requirement that the permittee conduct test procedures in compliance with 40 CFR Part 136. However, that provision of the draft permit expressly states that test procedures must comply with 30 TAC §§ 319.11 – 319.12 and those TCEQ rules state that “effluents shall be analyzed according to test methods specified in 40 CFR Part 136...”. Therefore, the Protestants are simply mistaken in thinking that the draft permit does not require compliance with the 40 CFR Part 136 test methods and this mistaken concern does not constitute a material issue of fact that is appropriate for a contested case hearing.

In light of the above responses to all the grounds raised by the Protestants, there is no basis for a contested case hearing and the TCEQ Commissioners are well justified in making a decision on this permit application without such a hearing.

Please feel free to contact me if you have any questions concerning this response to the hearing requests.

Sincerely,



Stephen C. Dickman

Enclosures

cc: Randy Smith, Formosa Plastics Corporation, Texas  
Jeff Lee, Formosa Utility Venture, Ltd.

# **EXHIBIT 1**

**AFFIDAVIT OF CHAD LEE**

STATE OF TEXAS                    §  
  §  
COUNTY OF CALHOUN           §

Before me, the undersigned authority, on this day personally appeared Chad Lee who is personally known to me, and being first duly sworn according to law, upon his oath deposed and said:

1.        “My name is Chad Lee. I am over twenty-one (21) years of age, of sound mind, and have never been convicted of a felony. I am fully competent to testify to, and have personal knowledge of, the facts stated within this affidavit, and every statement of fact contained herein is true and correct.

2.        “I am a employed by Formosa Plastics Corporation, Texas (“Formosa”) at its plastics and chemicals manufacturing facility located at 201 Formosa Drive, one mile north of the intersection of State Highway 35 and Farm-to-Market Road 1593, northeast of the City of Point Comfort, Texas. My current employment position with Formosa is Assistant Project Manager of the Water Department. I have held that position for the past 6 months and I have worked for Formosa for a total of 8 years. In my work for Formosa, I am personally knowledgeable about the manufacturing processes and related wastewater and waste management facilities and practices used by Formosa at its Point Comfort facility.

3.        “Over the years, Formosa has experienced an increase in wastewater discharge flow rates of approximately 1,000 gallons per minute (gpm) due to various manufacturing process debottlenecking projects (e.g., a chlor-alkali plant project that increased production about 25%; various smaller debottlenecking process changes) and the new construction of new manufacturing units (e.g., the new specialty polyvinyl chloride (SPVC) manufacturing unit; the new circulating fluidized bed (CFB) energy unit).

4.        “Currently Formosa does not have a copper concentration discharge limit in its permit, only a mass limit expressed in maximum pounds of copper discharged per day. Although Formosa has added new manufacturing units and increased production resulting from debottlenecking projects, Formosa’s routinely monitored discharge concentration for copper into Lavaca Bay has remained the same at about 20 parts per billion (ppb).

5.        “Formosa is attempting to recycle more wastewater, some of which will be returned though the physical treatment system at internal Outfall 201. Therefore, pursuant to the Clean Water Act Subpart I, we have to test for Subpart I parameters at the “end of pipe”. Subsequently, Outfall 201 has to be added to internal Outfall 101 with respect to total chloroform discharge. Therefore, the new chloroform limit in the TCEQ draft permit now takes into account chloroform at Outfall 101 as well as chloroform at Outfall 201. The TCEQ draft permit refers to the combination of these two outfalls as “Outfall Sum” and the new chloroform limit pertains to Outfall Sum. In addition, Formosa monitors for chloroform as part of the Lavaca Bay

Monitoring Program in which chloroform is monitored in sediments and fish tissues, and water and pore-water.

6. "Formosa samples for dioxins and furans every quarter as required by the existing permit. For the past 10 years, all sampling results have been "non-detect" for dioxins and furans. Therefore, Formosa never expects to have dioxins/furans in its wastewater discharge. If Formosa were ever to experience dioxins/furans in its wastewater discharges, then we would know that there was an upset within one of the manufacturing units and such upset condition would only be a temporary condition until the problem was corrected.

7. "Formosa has been performing an extensive Receiving Water Monitoring Program on a quarterly basis since September 1993 using a TCEQ approved Scope of Work. The data that has been collected over the years indicates that there has been no negative impact to Lavaca Bay. Additionally, this data is submitted to the TCEQ each year as a part of the annual reporting requirement under the existing permit.

8. "Formosa reports all non-compliances as required by the existing permit. This self-reporting of permit violations is accomplished through data reported on Formosa's monthly discharge monitoring reports (DMRs) and through a verbal notification to the TCEQ regional office followed up by a written report as required by the permit.

9. "Formosa employs a facility-wide Total Housekeeping Management (THM) program which is a systematic and routine program for ensuring that the entire facility is kept clean and that any spills, leaks, and releases of both product and waste materials are immediately addressed. Specifically regarding polyethylene pellets and PVC dust, personnel sweep up process and loading areas at least once per shift. Storm water conveyances and structures, including permitted wastewater outfalls are routinely cleaned to remove pellets and debris. Also, each structure and wastewater outfall is inspected once per shift for floating debris, and the permitted outfalls are checked prior to every gate opening.

10. "Formosa performs quarterly biomonitoring as required by the existing permit. This biomonitoring is done by a third party consultant (Atkins environmental toxicology laboratory). These biomonitoring results are self-reported via the DMRs and specific reporting tables are submitted to the TCEQ Water Quality Assessment Team as required by the permit. These biomonitoring results show no biomonitoring failures in over ten years.

11. "I believe the Formosa Wastewater Unit employs Best Available Technology in that, among other things, Formosa maintains round-the-clock manned operations; takes numerous analytical samples to monitor quality; employs real-time data using a distributive control system (DCS) that continuously monitors and makes adjustments to maintain wastewater discharge quality in compliance with permit requirements.

12. "Formosa continuously monitors pH and temperature as required by the permit. Any deviations are self-reported as required per the permit.

13. "Formosa has two internal Outfalls: internal Outfall 101 accounts for all organic wastewater streams and internal Outfall 201 accounts for all inorganic wastewater streams. These individual outfalls each have their own specific permit limits and are sampled and reported

in the DMRs required by the permit. The combined Outfall 001, which represents Formosa's final effluent discharge to Lavaca Bay, has its own permit limits and is sampled and reported as required by the permit.

14. "Formosa follows the required test methods as specified in the permit which specifies the TAC). Any outside labs utilized are certified by the National Environmental Laboratory Accreditation Program and follow EPA and TCEQ required test methods."

Chad Lee 12/28/15  
Chad Lee

SUBSCRIBED AND SWORN to before me, the undersigned notary, on the 28<sup>th</sup> day of December, 2015.



Lana M. Taylor  
Notary in and for the State of Texas