

Secretary's Order No.: **2009-A-0036**

RE: Proposed Adoption of New Federal Area Source Standard into
Regulation No. 1138 of the
State of Delaware Regulations Governing the Control of Air Pollution:
“Emission Standards for Hazardous Air Pollutants for Source Categories”, Section 10.0:
Area Source Plating & Polishing Operations

Date of Issuance: October 13, 2009

Effective Date of the Amendment: November 11, 2009

I. Background:

A public hearing was held on Tuesday, August 25, 2009, at 6:00 p.m. at the Department of Natural Resources and Environmental Control (“DNREC”, “Department”) Air Quality Management Office, 715 Grantham Lane, New Castle, Delaware, to receive public comment on the proposed adoption of a new federal area source standard into Regulation 1138 of the *State of Delaware Regulations Governing the Control of Air Pollution*, “Emission Standards for Hazardous Air Pollutants for Source Categories”, Section 10.0: Area Source Plating and Polishing Operations. The new air toxics standard may impact any owner or operator of a facility that deposits metal coatings onto metal parts or products by either electroplating or electroless coating operations. The new standard also applies to the dry mechanical polishing (or grinding) of these coated parts or products. Typically, these metal coating and dry polishing operations provide a decorative finish, a corrosion-resistance finish, or a wear-resistance finish to the parts or products.

Congress sought to reduce cancer and non-cancer health risks due to the exposure to hazardous air pollutants (“HAPs”) in the 1990 Amendments to the Clean Air Act. Under Section 112(k) – *Area Source Program* – Congress mandated that the EPA

identify 30 or more HAPs that posed the greatest threat to public health in urban areas, and to identify the area (i.e., small) sources that emit any of those pollutants. In July 2008, the EPA promulgated another of these federal area source standards applicable to facilities in Delaware. This standard, found at 40 CFR, Part 63, Subpart WWWW, is applicable to a variety of electroplating and electroless plating processes and dry polishing operations.

This federal standard addresses the emissions of five (5) heavy metals: cadmium, chromium, lead, manganese and nickel. Compounds of each of these metals, except manganese, have been classified as known or probable carcinogens. The systematic impacts of the various metal compounds differ; however, compounds of all of these metals can pose non-cancerous risks to the exposed public.

DNREC's Air Quality Management Section's planned adoption of the new air toxics standards will provide increased protection for Delawareans against a variety of potential adverse health effects that have been linked to long-term exposure to the compounds of cadmium, chromium, lead, manganese, and/or nickel. The proposed adoption will also bring Delaware's air toxics regulatory program into closer alignment with the U.S. Environmental Protection Agency's ("EPA") National Emissions standards for Hazardous Air Pollutants for Area or Small Sources.

The Department has the statutory basis and legal authority to act with regard to these promulgations, pursuant to 7 Del.C., Chapter 60. No other Delaware regulations are affected by these proposals.

A few comments were received by the Department from members of the public regarding the aforementioned proposed promulgation, both prior to and at the time of the

public hearing held on August 25, 2009. Throughout this promulgation process, the Department's personnel provided answers to the public's questions and comments in a thorough and timely manner. Proper notice of the hearing was provided as required by law. Afterwards, Hearing Officer Lisa A. Vest prepared her Hearing Officer's Report dated October 6, 2009, which is attached and expressly incorporated into this Order regarding this matter, and submitted the same to the Secretary for review and consideration.

II. Findings:

The Department has provided a reasoned analysis and a sound basis in the record to support the issuance of the final adopted regulation proposed in this matter. Moreover, the following findings and conclusions are entered at this time:

1. Proper notice of the hearing was provided as required by law;
2. The Department has jurisdiction under its statutory authority to make a determination in this proceeding;
3. The Department provided adequate public notice of the proceeding and the public hearing in a manner required by the law and regulations;
4. The Department held a public hearing in a manner required by the law and regulations;
5. The Department considered all timely and relevant public comments in making its determination;
6. The Department has reviewed this proposed amendment in the light of the Regulatory Flexibility Act, and has determined it to be lawful, feasible and desirable, and that the revisions as proposed should be applied to all Delaware

citizens and members of the regulated community equally in order to provide increased public health to Delaware's citizens, as well as to provide greater consistency between current state air toxics standards and the recently promulgated federal standard on which this proposed amendment is based;

7. Adoption of this proposed new air toxics standard will provide increased protection for Delawareans against a variety of potential adverse health effects that have been linked to long-term exposure to the compounds of cadmium, chromium, lead, manganese and/or nickel;
8. The adoption of the aforementioned new air toxics standard will also bring Delaware's air toxics regulatory program into closer alignment with the U.S. EPA's National Emissions Standards for Hazardous Air Pollutants for Area or Small Sources;
9. DNREC's proposed adoption of the new Section 10.0 in the existing Regulation No. 1138 is more stringent than the federal rule, and provides additional "best operating practices", including the requirement of the owner/operator of an affected facility using a control system to (1) develop and implement a Startup, Shutdown, and Malfunction plan; to (2) conduct daily monitoring of control device(s); and (3) maintain recordkeeping to demonstrate proper operation and maintenance of the facility;
10. The Department has an adequate record for its decision, and no further public hearing is appropriate or necessary;
11. The Department's proposed adoption of the aforementioned new air toxics standard, Section 10.0: Area Source Plating and Polishing Operations, to

Delaware's existing Regulation 1138, "*Emission Standards for Hazardous Air Pollutants for Source Categories*", as published in the August 1, 2009 *Delaware Register of Regulations*, is adequately supported, not arbitrary or capricious, and is consistent with the applicable laws and regulations. Consequently, it should be approved as a final regulation, which shall go into effect ten days after its publication in the next available issue of the *Delaware Register of Regulations*; and

12. The Department shall submit the proposed regulation as a final regulation to the *Delaware Register of Regulations* for publication in its next available issue, and shall provide written notice to the persons affected by the Order.

III. Order:

Based on the record developed, as reviewed in the Hearing Officer's Report dated October 6, 2009 and expressly incorporated herein, it is hereby ordered that the proposed adoption of the aforementioned new air toxics standard, Section 10.0: Area Source Plating and Polishing Operations, to Delaware's existing Regulation 1138, "*Emission Standards for Hazardous Air Pollutants for Source Categories*", be promulgated in final form in the customary manner and established rule-making procedure required by law.

IV. Reasons:

The promulgation of the aforementioned new air standard to existing State of Delaware Regulation 1138 will bring Delaware's air toxics regulatory program into closer alignment with the U.S. EPA's National Emissions Standards for Hazardous Air Pollutants for Area or Small Sources. The public, especially in the vicinity of the

facilities affected by this promulgation, will benefit from the reduction of heavy metal emission from these and future affected facilities.

In developing this regulation, the Department has balanced the absolute environmental need for the State of Delaware to adopt and promulgate regulations concerning this matter with the important interests and public concerns surrounding the same, in furtherance of the policy, purposes and authority of 7 Del. C., Ch. 60.

/s/ Collin P. O'Mara

Collin P. O'Mara

Secretary

HEARING OFFICER'S REPORT

TO: Collin P. O'Mara, Secretary
Department of Natural Resources and Environmental Control

FROM: Lisa A. Vest
Public Hearing Officer, Office of the Secretary
Department of Natural Resources and Environmental Control

RE: Proposed Adoption of New Federal Area Source Standard into Regulation No. 1138 of the *State of Delaware Regulations Governing the Control of Air Pollution*: "Emission Standards for Hazardous Air Pollutants for Source Categories", Section 10.0: Area Source Plating & Polishing Operations

DATE: October 6, 2009

I. **Background:**

A public hearing was held on Tuesday, August 25, 2009, at 6:00 p.m. at the Department of Natural Resources and Environmental Control ("DNREC", "Department") Air Quality Management Office, 715 Grantham Lane, New Castle, Delaware, to receive public comment on the proposed adoption of a new federal area source standard into Regulation 1138 of the *State of Delaware Regulations Governing the Control of Air Pollution*, "Emission Standards for Hazardous Air Pollutants for Source Categories", Section 10.0: Area Source Plating and Polishing Operations. The new air toxics standard may impact any owner or operator of a facility that deposits metal coatings onto metal parts or products by either electroplating or electroless coating operations. The new standard also applies to the dry mechanical polishing (or grinding) of these coated parts or products. Typically, these metal coating and dry polishing operations provide a decorative finish, a corrosion-resistance finish, or a wear-resistance finish to the parts or products.

Congress sought to reduce cancer and non-cancer health risks due to the exposure to hazardous air pollutants (“HAPs”) in the 1990 Amendments to the Clean Air Act. Under Section 112(k) – *Area Source Program* – Congress mandated that the EPA identify 30 or more HAPs that posed the greatest threat to public health in urban areas, and to identify the area (i.e., small) sources that emit any of those pollutants. In July 2008, the EPA promulgated another of these federal area source standards applicable to facilities in Delaware. This standard, found at 40 CFR, Part 63, Subpart WWWW, is applicable to a variety of electroplating and electroless plating processes and dry polishing operations.

This federal standard addresses the emissions of five (5) heavy metals: cadmium, chromium, lead, manganese and nickel. Compounds of each of these metals, except manganese, have been classified as known or probable carcinogens. The systematic impacts of the various metal compounds differ; however, compounds of all of these metals can pose non-cancerous risks to the exposed public.

DNREC’s Air Quality Management Section’s planned adoption of the new air toxics standards will provide increased protection for Delawareans against a variety of potential adverse health effects that have been linked to long-term exposure to the compounds of cadmium, chromium, lead, manganese, and/or nickel. The proposed adoption will also bring Delaware’s air toxics regulatory program into closer alignment with the U.S. Environmental Protection Agency’s (“EPA”) National Emissions standards for Hazardous Air Pollutants for Area or Small Sources.

The Department has the statutory basis and legal authority to act with regard to these promulgations, pursuant to 7 Del.C., Chapter 60. No other Delaware regulations are affected by these proposals.

A few comments were received by the Department from members of the public regarding the aforementioned proposed promulgation, both prior to and at the time of the public hearing held on August 25, 2009. Throughout this promulgation process, the Department's personnel provided answers to the public's questions and comments in a thorough and timely manner. Proper notice of the hearing was provided as required by law.

II. Summary of Hearing Record:

At the public hearing on August 25, 2009, Jim Snead of the Department's Air Quality Management Section offered the Department's 48 exhibits regarding this proposed promulgation (which were then entered into the formal hearing record by this Hearing Officer), as well as a brief explanation with regard to the salient points of the proposed adoption of this new air toxics standard into Regulation No. 1138. Mr. Snead began the Department's presentation by explaining that the purpose of this action is to address two specific types of hazardous air pollutant area sources here in Delaware: (1) those facilities that add metal coatings to parts or products through either electroplating or electroless coating operations; and/or (2) those facilities which perform polishing or grinding of parts or products after said items have been coated with metal compounds that include cadmium, chromium, lead, manganese, and/or nickel.

In 2005, EPA began adopting its federal rules pertaining to small area sources under the Clean Air Act, specifically, Section 112(k), which addresses the incidences of

cancer near small facilities that are located predominantly in urban areas. Congress, under Section 112(k) of the Clean Air Act, directed EPA to identify the 30 or more HAPs that posed the greatest threat to public health in urban areas, and to identify the area (i.e., small) sources that emit any of those pollutants. Once these source areas were identified, EPA was further directed to promulgate regulations with the stated goal of achieving a 75% reduction in the incidences of cancer in those urban areas. Among the HAPs that were identified by EPA at that time were cadmium, chromium, lead, manganese and nickel compounds, which, in the federal rule itself, are referred to as the “plating and polishing” metal HAPs. EPA also identified 70 different categories of small sources typically found in urban areas, one of which was the plating and polishing operations. In July of 2008, EPA finalized its rule regarding these sources, and thus Delaware now needs to bring its air toxics regulatory program into closer alignment with the federal rules associated with this matter. Although the EPA’s objective in their federal rulemaking concerning these area or small sources was to address the health concerns associated with the aforementioned five metals and their compounds (i.e., their classification as either probable or known carcinogens), additional long-term benefits from the reduction of these compounds are realized in the human renal system, the central nervous system, the respiratory system, and various aspects of the blood, skin and overall human development.

The draft version of the proposed adoption of Section 10.0 was initially presented to the public at a workshop held at DNREC’s Grantham Lane office in New Castle, Delaware, on June 9, 2009. Public comment received from the regulated community at that time resulted in some minor changes to the draft regulation (which aided in clarity

and understanding to this proposed rulemaking), after which the proposed regulation was published in the Delaware Register of Regulations on August 1, 2009.

Mr. Snead concluded the Department's presentation at the hearing by explaining that DNREC's proposed adoption of the new Section 10.0 in the existing Regulation No. 1138 is more stringent than the federal rule, and provides additional "best operating practices", including the requirement of the owner/operator of an affected facility using a control system to (1) develop and implement a Startup, Shutdown, and Malfunction plan; to (2) conduct daily monitoring of control device(s); and (3) maintain recordkeeping to demonstrate proper operation and maintenance of the facility. Moreover, the adoption of this proposed new air toxics standard will provide increased protection for Delawareans against a variety of potential adverse health effects that have been linked to long-term exposure to the compounds of cadmium, chromium, lead, manganese and/or nickel, and will also bring Delaware's air toxics regulatory program into closer alignment with the U.S. EPA's National Emissions Standards for Hazardous Air Pollutants for Area or Small Sources.

Following the Department's presentation, the public hearing was opened up for public comment. Only one member of the public attended this hearing, and his questions (which concerned his own business' ability to be compliant under this proposed regulatory adoption) were thoroughly answered by Mr. Snead at the time of the hearing. No additional public comments were received by the Department regarding this proposed promulgation. It should also be noted that the Department has reviewed these proposed amendments in the light of the Regulatory Flexibility Act, and believes the same to be

lawful, feasible and desirable, and that the recommendations as proposed should be applicable to all Delaware citizens equally.

III. Conclusions and Recommendations:

Based on the above discussion, I conclude that the Department has provided appropriate reasoning regarding the need for the proposed adoption of the aforementioned new federal area source standard into Regulation 1138 of the *State of Delaware Regulations Governing the Control of Air Pollution*, “Emission Standards for Hazardous Air Pollutants for Source Categories”, to wit: “Section 10.0: Area Source Plating and Polishing Operations”, and has thoroughly addressed any public questions and/or comments provided during the various phases of the record developed in this matter. Accordingly, I recommend promulgation of these proposed amendments in the customary manner provided by law.

Further, I recommend the following findings:

1. Proper notice of the hearing was provided as required by law.
2. The Department has jurisdiction under its statutory authority to make a determination in this proceeding;
3. The Department provided adequate public notice of the proceeding and the public hearing in a manner required by the law and regulations;
4. The Department held a public hearing in a manner required by the law and regulations;
5. The Department considered all timely and relevant public comments in making its determination;

6. The Department has reviewed this proposed amendment in the light of the Regulatory Flexibility Act, and has determined it to be lawful, feasible and desirable, and that the revisions as proposed should be applied to all Delaware citizens and members of the regulated community equally in order to provide increased public health to Delaware's citizens, as well as to provide greater consistency between current state air toxics standards and the recently promulgated federal standard on which this proposed amendment is based;
7. Adoption of this proposed new air toxics standard will provide increased protection for Delawareans against a variety of potential adverse health effects that have been linked to long-term exposure to the compounds of cadmium, chromium, lead, manganese and/or nickel;
8. The adoption of the aforementioned new air toxics standard will also bring Delaware's air toxics regulatory program into closer alignment with the U.S. EPA's National Emissions Standards for Hazardous Air Pollutants for Area or Small Sources;
9. DNREC's proposed adoption of the new Section 10.0 in the existing Regulation No. 1138 is more stringent than the federal rule, and provides additional "best operating practices", including the requirement of the owner/operator of an affected facility using a control system to (1) develop and implement a Startup, Shutdown, and Malfunction plan; to (2) conduct daily monitoring of control device(s); and (3) maintain recordkeeping to demonstrate proper operation and maintenance of the facility;

10. The Department has an adequate record for its decision, and no further public hearing is appropriate or necessary;
11. The Department's proposed adoption of the aforementioned new air toxics standard, Section 10.0: Area Source Plating and Polishing Operations, to Delaware's existing Regulation 1138, "*Emission Standards for Hazardous Air Pollutants for Source Categories*", as published in the August 1, 2009 *Delaware Register of Regulations*, is adequately supported, not arbitrary or capricious, and is consistent with the applicable laws and regulations. Consequently, it should be approved as a final regulation, which shall go into effect ten days after its publication in the next available issue of the *Delaware Register of Regulations*; and
12. The Department shall submit the proposed regulation as a final regulation to the *Delaware Register of Regulations* for publication in its next available issue, and shall provide written notice to the persons affected by the Order.

/s/ Lisa A. Vest
LISA A. VEST
Public Hearing Officer