State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQ-050-14

UTAH AIR QUALITY BOARD MEETING

FINAL AGENDA

Wednesday, July 2, 2014 - 1:30 p.m.
195 North 1950 West, Room 1015
Salt Lake City, Utah 84116

I. Call-to-Order

II. Date of the Next Air Quality Board Meeting: August 6, 2014

III. Approval of the Minutes for June 4, 2014, Board Meeting.

IV. Propose for Public Comment: Amend R307-202. Emission Standards: General Burning. Presented by Mark Berger.

V. Propose for Public Comment: Amend R307-335; R307-342 through R307-350; and R307-352 through R307-355. Presented by Mark Berger.

VI. Informational Items.
- A. $PM_{2.5}$ State Implementation Plan Subpart 4 Update. Presented by Bill Reiss.
- B. Title V Fee Restructuring. Presented by David Beatty.
- C. Water Heater Low NOx Analysis. Presented by Patrick Barickman.
- D. Utah Association of Realtors Response to Wood Burning Stoves. Presented by Kreg Wagner.
- E. Air Toxics. Presented by Robert Ford.
- F. Compliance. Presented by Jay Morris and Harold Burge.
- G. Monitoring. Presented by Bo Call.
- H. Other Items to be Brought Before the Board.

In compliance with the American with Disabilities Act, individuals with special needs (including auxiliary communicative aids and services) should contact Dana Powers, Office of Human Resources at (801) 536-4413 (TDD 536-4414).

ITEM 3

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UTAH AIR QUALITY BOARD MEETING
June 4, 2014 – 1:30 p.m.
195 North 1950 West, Room 1015
Salt Lake City, Utah 84116

DRAFT MINUTES

I. Call-to-Order

Steve Sands called the meeting to order at 1:36 p.m.

Board members present: Kathy Van Dame, Steve Sands, Kerry Kelly (attendance by phone), Robert Paine, Michael Smith, and Tammie Lucero (attendance by phone)

Excused: Amanda Smith, Karma Thomson, and Erin Mendenhall

Executive Secretary: Bryce Bird

II. Date of the Next Air Quality Board Meeting: July 2, 2014

III. Approval of the Minutes for May 7, 2014, Board Meeting.

Three minor word corrections on pages 4 and 5 were made to the minutes for better clarity.

- Robert Paine moved that the Board approve the minutes as corrected. Kathy Van Dame seconded. The Board approved unanimously.

IV. Propose for Public Comment: Amend R307-342-3. Adhesives and Sealants. Exemptions. Presented by Mark Berger.

Mark Berger, Environmental Planning Consultant at DAQ, stated that some Department of Defense (DOD) specifications for adhesives and sealants do not meet the requirements in the current R307-342-3. Because several sources throughout the state must use DOD military specs for adhesives and sealants used in much of their products sold to the United States Armed Forces, we believe an exemption for DOD contractors should be added to the rule. Staff recommends the Board propose R307-342-3, Adhesives and Sealants, Exemptions, for public comment.

- Kathy Van Dame moved the Board propose for public comment to amend R307-342-3, Adhesives and Sealants, Exemptions. Michael Smith seconded. The Board approved unanimously.

V. Propose for Public Comment: New Rules R307-501. Oil and Gas Industry: General Provisions; R307-502. Oil and Gas Industry: Pneumatic Controllers; R307-503. Oil and Gas Industry: Combustion Devices; and R307-504. Oil and Gas Industry: Tank Truck Loading. Presented by Colleen Delaney and Mark Berger.

Colleen Delaney, Environmental Scientist at DAQ, stated that ozone throughout Utah is something DAQ has been measuring for a number of years. It has traditionally been viewed as a summertime problem. While summertime ozone is currently below the national ambient air quality standards (NAAQS), EPA is expected to lower the ozone standard to within the range of 60 to 70 parts per billion within the next two years, which will be an issue potentially throughout the entire state of Utah for summertime ozone. High values in the Uinta Basin that have been recorded in recent years are reflected of wintertime ozone. The wintertime ozone occurs during temperature inversions when there is snow on the ground, is episode dependent, and driven by the meteorology. The current focus of DAQ's efforts is on volatile organic compounds (VOCs) because that is what the research is showing are the primary pollutants driving the formation of ozone during the wintertime episodes, especially the highly reactive VOCs. The combination of both the summertime and wintertime issues is the focus for these new rules.

Utah entered into EPA's ozone advance program with the goal to proactively lower ozone values in the Uinta Basin. As part of that effort, DAQ drafted these four rules to establish general operating provisions for the oil and gas industry, establish control requirements that are highly cost-effective, and ensure that existing air pollution control equipment operates effectively. These draft rules were presented at a stakeholder public information meeting on July 30, 2013, and have been revised to address stakeholder comments. Ms. Delaney followed her introduction with a brief summary of each proposed rule. Staff recommends the Board propose for public comment new rules R307-501, R307-502, R307-503, and R307-504.

In response as to why DAQ is going forward on these rules when the science and the chemistry has not determined if they will make a difference, Ms. Delaney responded that the information received from the scientists doing research in the Uinta Basin indicates that VOCs right now appears to be the pollutant that is driving ozone formation. So we are working on trying to identify cost effective strategies that would reduce VOC emissions, and we also want to start moving forward now to be achieving early reductions with the best information we have available. Finally, the reason behind the different strategies has to do with the underlying inventory. In some cases DAQ did not have enough information to calculate the actual tonnage reduction and so where they could estimate a tonnage reduction it was done, and in other cases they relied on the work done in other states regarding the cost effectiveness of the strategy. DAQ is currently in the process of working with the oil and gas producers in the state to improve its emissions inventory system so more detailed information can be provided.

- Robert Paine moved that the Board propose for public comment new rules R307-501, R307-502, R307-503, and R307-504. Michael Smith seconded. The Board approved unanimously.

VI. Informational Items.

Tammie Lucero exits the meeting.

A. Smoke is in Your Eyes. Presented by Tyler Poulson of the Salt Lake City Mayor's Office.

Tyler Poulson of the Salt Lake City Mayor's office read talking points on behalf of Mayor Ralph Becker. Wood smoke along the Wasatch Front plays a strikingly large role in its contribution to particulate pollution during inversions. Research indicates that wood smoke is more dangerous than other pollutants due to the toxic chemicals it contains. Citizens have a right to be comfortable and safe in their homes and yards and not have wood smoke threatening their health. Salt Lake City commends recent efforts by DAQ to examine solutions to the harm caused by wood smoke and it supports better understanding and action on non-residential wood smoke. The recent workshop held by DAQ seems like a reasonable complement to the existing no burn restrictions for residential addresses and Salt Lake City looks forward to the opportunity to review and comment on a draft proposal. Salt Lake City joins DAQ in its concern regarding wood smoke and the imbalanced role it plays in creating particulate pollution to Utah's airsheds. The efforts underway are commended but much more needs to be done to truly mitigate the threat we face. The DAQ is asked to let cities in the region know how they might help to eliminate this source of pollution in our valley.

B. Environmental Protection Agency Rulemaking for Radon Emissions for Operating Uranium Mills, 40 CFR Part 61 Subpart W. Presented by Sarah Fields of Uranium Watch.

Sarah Fields, Program Director at Uranium Watch, stated that she wants to bring attention to EPA's proposed revision to the national emission standards for radon emission from operating mill tailings, 40 Code of Federal Register Part 61 Subpart W. DAQ administers and enforces these regulations which are currently applicable to two uranium mills in Utah, the White Mesa Mill and the Shootaring Canyon Mill. Her primary concern is that new regulations will allow indefinite, unfettered, unmonitored, unreported, and unmitigated release of radon emissions from two larger tailings impoundments at the White Mesa Mill, and from any newer tailings impoundments. Under the current regulations the radon emissions standards for existing impoundments requires annual radon flux monitoring and reporting. EPA's proposed rule removes the requirement for any radon monitoring for those existing impoundments. Ms. Fields then discussed EPA's justification for removing the radon flux monitoring requirements and gave Uranium Watch's concerns with the proposed rule. In closing, Ms. Fields commented that Utah should not support EPA's proposed rule change that eliminates the requirement to monitor radon emissions from existing impoundments. Comments to EPA on the proposed rule are due July 31, 2014. DAQ staff responded that there is a division of responsibilities between the Division of Radiation Control (DRC) and the DAQ and many of the issues are part of the license that is under review with DRC. DAQ is reviewing EPA's proposed rule and had not planned to make comments at this point.

Kerry Kelly exited the meeting during this agenda item.

C. 2015 Research Program Update. Presented by Patrick Barickman.

Patrick Barickman, Technical Analysis Section Manager at DAQ, briefed the Board on the research projects selection and updates. DAQ and a group of researchers from the university community chose projects based on the wider set of goals that was presented previously as well as the ability to fit within the budget and also have to be projects we could get answers to that serve the needs of DAQ and the wider community. Of 40 suggested projects, 14 were selected and grouped into seven project categories. Roughly 41% is going towards monitoring and analysis of the new monitoring, 56% will focus on modeling and emissions inventory work in both the Uinta Basin and Wasatch Front, and 3% will be administration/communication. By mid-June the plan is to have the general scopes of work go directly to the principle investigators. The researchers will then have about a month to get back with DAQ with a detailed scope of work, including a budget. The intent is to aim for a mid-July start for the majority of the projects. Finally, DAQ is in the process of developing a communication strategy which will include stakeholder meetings and progress reports.

D. Utah Air Toxics Monitoring Report. Presented by Roman Kuprov.

Roman Kuprov, Environmental Scientist at DAQ, stated that due to an increase of public interest about ambient toxics in the state DAQ prepared a report of analyzed data. Organic hazardous air pollutants (HAPs) data from stations in West Valley, Bountiful, and Phoenix, Arizona were compared over several years. Mr. Kuprov then gave a brief description of the air toxics monitoring report. In summary, the state's composition of its organics between Salt Lake and other urbanized areas in the Western United States show that most of our organic HAPs are below the chronic exposure levels. Only six of the organic HAPs have the frequency of about 5% that breach the chronic threshold and only eleven of these pollutants breach the same threshold for the one-in-one million cancer risk. Some of the organics showed unusually high levels and are likely associated with anthropogenic activity which will need to be investigated more closely. A detailed report is in the final editing stages and will include intensities, the long-term trends, discussion about health effect, possible sources of these pollutants, and such.

E. Wood Smoke Update. Presented by Joel Karmazyn.

Joel Karmazyn, Environmental Scientist at DAQ, reported that the Utah Association of Realtors was invited to address the Board on its concerns with a requirement to remove uncertified wood stoves through a real estate transaction, to which they declined but they will issue a written statement to the Board. In reporting back on information from fire chiefs of their experience with infrared (IR) camera to different profiles, Mr. Karmazyn stated that IR cameras are routinely used to locate fires and hot spots within walls but they are not used to differentiate smoke plume. It appears DAQ will have to continue its own experimentations with the IR cameras.

A summary was given of the wood smoke information meeting held on June 2, 2014. The meeting sought input from businesses and industry on the concept of including them in a solid fuel burning rule. A draft proposed rule was distributed to the Board for discussion purposes only. At the informational meeting all were in agreement with the proposal to move forward to include commercial and industrial solid fuel burning sources. As staff later looked into this recommendation, it was realized that the terms commercial sources and industrial sources in the proposed draft rule would ultimately

require further clarification. There was uniform agreement and recommendation that only restaurants and food preparation services that register with DAQ be exempt from the proposed rule. It was also recommended that DAQ send announcements to Legislatures on all rule making proposals so they can notify their constituents. Mr. Karmazyn concluded that at this point DAQ has not started on a plan for the conversion of residential solid fuel sole sources currently on its registry.

F. Air Toxics. Presented by Robert Ford.

Staff responded to questions on a demolition penalty.

G. Compliance. Presented by Jay Morris and Harold Burge.

Staff responded that the four miscellaneous inspections were the result of 24 complaints received regarding residential burning after the season was closed.

H. Monitoring. Presented by Bo Call.

Bo Call, Monitoring Section Manager at DAQ, updated that the ozone season has started and we have already had some voluntary action days. The format is the same as during the winter. With regard to spikes in $PM_{2.5}$ and PM_{10} due to high winds and if there is any analysis on what fraction is $PM_{2.5}$ during these events, Mr. Call responded that there is nothing constant of the fraction of $PM_{2.5}$. In addition, quite a bit of analysis is done for the justification of exceedances for exceptional events which includes a month by month average concentration. Examples of actions that are mandated when an ozone mandatory action day is called were also given.

I. Other Items to be Brought Before the Board.

Mr. Bird announced that Erin Mendenhall was asked by Governor Herbert, and accepted, to be a member of the Air Quality Board.

Mr. Bird updated that EPA has proposed a new carbon reductions rule. The proposal came out this month and it will have a 120-day comment period from when it is published in the Federal Register. Next June EPA will publish the final rule. Then the SIP-like state plan would be due one year after the final rule is published and there would be an option for a one year extension if a state demonstrated that it was necessary. There is also an opportunity for a one year extension if a state is going to be part of a regional planning effort. Utah received a reduction target to reduce its carbon emissions by 27.08% by 2030. It uses four categories of reduction to get us there: energy efficiency improvements at existing coal-fired power plants; more use of our cleanest technology; additional renewable energy; and demand site energy efficiency improvements.

Finally, there was brief discussion on the electric vehicle charging stations grid and if there is an agency/entity in charge of the infrastructure. There is currently a taskforce of interested parties that is more of a clearinghouse for this issue, but there is not an official group in charge of all of the electric vehicle charging stations at this time.

Meeting adjourned at 3:59 p.m.

ITEM 4

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Bryce C. Bird
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DAQ-052-14

M E M O R A N D U M

TO: Air Quality Board

THROUGH: Bryce C. Bird, Executive Secretary

FROM: Joel Karmazyn, Environmental Scientist

DATE: June 24, 2014

SUBJECT: PROPOSE FOR PUBLIC COMMENT: Amend R307-202. Emission Standards: General Burning.

Native American tribes conduct ceremonial burning that involves heating stones in a fire and transferring the hot rocks to a sweat lodge. This ceremonial ritual cannot be conducted under the current rule during restricted burning days. Native American tribe members have requested an exemption from the burning rule restriction to conduct this religious ceremony when conducted by a "Native American spiritual advisor," as newly defined in R307-202.

Staff Recommendation: Staff recommends the Board propose R307-202 for public comment.

R307. Environmental Quality, Air Quality.
R307-202. Emission Standards: General Burning.
R307-202-1. Applicability.

R307-202-4 through R307-202-8 applies to general burning within incorporated community under the authority of county or municipal fire authority.

R307-202-2. Definitions.

The following additional definitions apply only to R307-202.

[~~(1)~~]"Attainment areas" means any area that meets the national primary and secondary ambient air quality standard (NAAQS) for the pollutant.

[~~(2)~~]"County or municipal fire authority" means the public official so designated with the responsibility, authority, and training to protect people, property, and the environment from fire, within their respective area of jurisdiction.

[~~(3)~~]"Federal Class I Area" means an area that consists of national parks exceeding 6,000 acres, wilderness areas and national memorial parks exceeding 5,000 acres, and all international parks that were in existence on August 7, 1977. See Clean Air Act section 162(a).

[~~(4)~~]"Fire hazard" means a hazardous condition involving combustible, flammable, or explosive material that represents a substantial threat to life or property if not immediately abated, as declared by the county or municipal fire authority.

"Native American spiritual advisor" means a person who leads, instructs, or facilitates a Native American religious ceremony or service; or provides religious counseling; is an enrolled member of a federally recognized Native American tribe; and is recognized as a spiritual advisor by a federally recognized Native American tribe. "Native American spiritual advisor" includes a sweat lodge leader, medicine person, traditional religious practitioner, or holy man or woman.

R307-202-3. Exclusions.

As provided in Section 19-2-114, the provisions of R307-202 are not applicable to:

(1) Except for areas zoned as residential, burning incident to horticultural or agricultural operations of:

(a) Prunings from trees, bushes, and plants; and

(b) Dead or diseased trees, bushes, and plants, including stubble.

(2) Burning of weed growth along ditch banks for clearing these ditches for irrigation purposes;

(3) Controlled heating of orchards or other crops during the frost season to lessen the chances of their being frozen so long as the emissions from this heating do not cause or contribute to an exceedance of any national ambient air quality standards and is consistent with the federally approved State Implementation Plan; and

(4) The controlled burning of not more than two structures per year by an organized and operating fire department for the purpose

of training fire service personnel when the National Weather Service clearing index is above 500. See also Section 11-7-1(2)(a).

(5) Ceremonial burning is excluded from R307-202-4(2) when conducted by a Native American spiritual advisor.

R307-202-4. Prohibitions.

(1) No open burning shall be done at sites used for disposal of community trash, garbage and other wastes.

(2) No person shall burn under this rule when the director issues a public announcement under R307-302. The director will distribute such announcement to the local media notifying the public that a mandatory no-burn period is in effect for the area where the burning is to occur.

R307-202-5. General Requirements.

(1) Except as otherwise provided in this rule, no person shall set or use an open outdoor fire for the purpose of disposal or burning of petroleum wastes; demolition or construction debris; residential rubbish; garbage or vegetation; tires; tar; trees; wood waste; other combustible or flammable solid, liquid or gaseous waste; or for metal salvage or burning of motor vehicle bodies.

(2) The county or municipal fire authority shall approve burning based on the predicted meteorological conditions and whether the emissions would impact the health and welfare of the public or cause or contribute to an exceedance of any national ambient air quality standard.

(3) Nothing in this regulation shall be construed as relieving any person conducting open burning from meeting the requirements of any applicable federal, state or local requirements concerning disposal of any combustible materials.

(4) The county or municipal fire authority that approves any open burning permit will retain a copy of each permit issued for one year.

R307-202-6. Open Burning - Without Permit.

The following types of open burning do not require a permit when not prohibited by other local, state or federal laws and regulations, when it does not create a nuisance, as defined in Section 76-10-803, and does not impact the health and welfare of the public.

(1) Devices for the primary purpose of preparing food such as outdoor grills and fireplaces;

(2) Campfires and fires used solely for recreational purposes where such fires are under control of a responsible person and the combustible material is clean, dry wood or charcoal; and

(3) Indoor fireplaces and residential solid fuel burning devices except as provided in R307-302-2.

R307-202-7. Open Burning - With Permit.

(1) No person shall knowingly conduct open burning unless the open burning activities may be conducted without a permit pursuant to R307-202-6 or the person has a valid permit for burning on a specified date or period, issued by the county or municipal fire

authority having jurisdiction in the area where the open burning will take place.

(2) A permit applicant shall provide information as requested by the county or municipal fire authority. No permit or authorization shall be deemed valid unless the issuing authority determines that the applicant has provided the required information.

(3) Persons seeking an open burning permit shall submit to the county or municipal fire authority an application on a form provided by the director for each separate burn.

(4) A permit shall be valid only on the lands specified on the permit.

(5) No material shall be burned unless it is clearly described and quantified as material to be burned on a valid permit.

(6) No burning shall be conducted contrary to the conditions specified on the permit.

(7) Any permit issued by a county or municipal fire authority shall be subject to the local, state, and federal rules and regulations.

(8) Open burning is authorized by the issuance of a permit, as stipulated within this rule, for specification in R307-202-7(10). These permits can only be issued when not prohibited by other local, state, or federal laws and regulations and when a nuisance as defined in Section 76-10-803 is not created and does not impact the health and welfare of the public.

(9) Individual permits, as stipulated within this rule, for the types of burning listed in R307-202-7(10) may be issued by a county or municipal fire authority when the clearing index is 500 or greater. When the clearing index is below 500, all permits issued for that day will be null and void until further notice from the county or municipal fire authority. Additionally, anyone burning on the day when the clearing index is below 500 or is found to be violating any part of this rule shall be liable for a fine in accordance with R307-130.

(10) Types of open burning for which a permit may be granted are:

(a) Except in nonattainment and maintenance areas, open burning of tree cuttings and slash in forest areas where the cuttings accrue from pulping, lumbering, and similar operations, but excluding waste from sawmill operations such as sawdust and scrap lumber.

(b) Open burning of trees and brush within railroad rights-of-way provided that dirt is removed from stumps before burning, and that tires, oil more dense than #2 fuel oil, tar, or other materials which can cause severe air pollution are not present in the materials to be burned, and are not used to start fires or to keep fires burning.

(c) Open burning of a fire hazard that a county or municipal fire authority determines cannot be abated by any other viable option.

(d) Open burning of highly explosive materials when a county or municipal fire authority, law enforcement agency or governmental agency having jurisdiction determines that onsite burning or detonation in place is the only reasonably available method for safely disposing of the material.

(e) Open burning for the disposal of contraband in the possession of public law enforcement personnel provided they demonstrate to the county or municipal fire authority that open burning is the only reasonably available method for safely disposing of the material.

(f) Open burning of clippings, bushes, plants and prunings from trees incident to property clean-up activities, including residential cleanup, provided that the following conditions have been met:

(i) Within only the counties of Washington, Kane, San Juan, Iron, Garfield, Beaver, Piute, Wayne, Grand and Emery, the county or municipal fire authority may issue a permit between March 1 and May 30 when the clearing index is 500 or greater. The county or municipal fire authority may issue a permit between September 15 to November 15 for such burning to occur when the state forester has approved the burning window under Section 65A-8-211 and the clearing index is 500 or greater.

(ii) In all other areas of the state, the county or municipal fire authority may issue a permit between March 30 and May 30 for such burning to occur when the clearing index is 500 or greater. The county or municipal fire authority may issue a permit between September 15 and October 30 for such burning to occur when the state forester has approved the burning window under Section 65A-8-211 and the clearing index is 500 or greater.

(iii) Such burnings occur in accordance with state and federal requirements;

(iv) Materials to be burned are thoroughly dry; and

(v) No trash, rubbish, tires, or oil are included in the material to be burned, used to start fires, or used to keep fires burning.

(g) Except for nonattainment and maintenance areas, the director may grant a permit for types of open burning not specified in R307-202-7(3) on written application if the director finds that the burning is consistent with the federally approved State Implementation Plan and does not cause or contribute to an exceedance of any national ambient air quality standards.

(i) This permit may be granted once the director has reviewed the written application with the requirements and criteria found within this rule at R307-202-7.

(ii) Open Burning Permit Criteria.

(A) The director or the county or municipal fire authority shall consider the following factors in determining whether, and upon what conditions, to issue an open burning permit:

(I) The location and proximity of the proposed burning to any building, other structures, the public, and federal Class I areas that might be impacted by the smoke and emissions from the burn;

(II) Burning will only be conducted when the clearing index is 500 or above; and

(III) Whether there is any practical alternative method for the disposal of the material to be burned.

(B) Methods to minimize emissions and smoke impacts may include, but are not limited to:

(I) The use of clean auxiliary fuel;

(II) Drying the material prior to ignition; and

(III) Separation for alternative disposal of materials that produce higher levels of emissions and smoke during the combustion process.

(C) Open burning permits are not valid during periods when the clearing index is below 500 or publicly announced air pollution emergencies or alerts have been declared in the area of the proposed burn.

(D) For burns of piled material, all piles shall be reasonably dry and free of dirt.

(E) Open burns shall be supervised by a responsible person who shall notify the local fire department and have available, either on-site or by the local fire department, the means to suppress the burn if the fire does not comply with the terms and conditions of the permit.

(F) All open burning operations shall be subject to inspection by the director or county or municipal fire authority. The permittee shall maintain at the burn site the original or a copy of the permit that shall be made available without unreasonable delay to the inspector.

(G) If at any time the director or the county or municipal fire authority granting the permit determines that the permittee has not complied with any term or condition of the permit, the permit is subject to partial or complete suspension, revocation or imposition of additional conditions. All burning activity subject to the permit shall be terminated immediately upon notice of suspension or revocation. In addition to suspension or revocation of the permit, the director or county or municipal fire authority may take any other enforcement action authorized under state or local law.

R307-202-8. Special Conditions.

(1) Open burning for special purposes or under unusual or emergency circumstances may be approved by the director if it is consistent with the federally approved State Implementation Plan and does not cause or contribute to an exceedance of any national ambient air quality standards.

(a) This permit may be granted once the director has reviewed the written application with the requirements and criteria in R307-202-7.

KEY: air pollution, open burning, fire authority
Date of Enactment or Last Substantive Amendment: [~~July 31, 2012~~]2014
Notice of Continuation: March 4, 2010
Authorizing, and Implemented or Interpreted Law: 19-2-104; 11-7-1(2)(a); 65A-8-211; 76-10-803

ITEM 5

State of Utah

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DAQ-051-14

M E M O R A N D U M

TO: Air Quality Board

THROUGH: Bryce C. Bird, Executive Secretary

FROM: Joel Karmazyn, Environmental Scientist

DATE: June 24, 2014

SUBJECT: PROPOSE FOR PUBLIC COMMENT: Amend R307-335; R307-342 through 350; and R307-352 through 355.

The EPA has indicated its intention to approve the area source coatings rules for the $PM_{2.5}$ State Implementation Plans as Reasonable Available Control Technology (RACT), but not until 1) they are amended to clarify that the amount of control removal specified in each rule is based on the entire system, and 2) the inspection and recordkeeping requirements for these systems are expanded. We have worked closely with EPA to craft agreeable rule language that is ready to be proposed for public comment.

In each of the existing rules, with the exception of R307-335, the add-on control efficiency is based on the control device, rather than a system-based efficiency which EPA requires; therefore, these values have been amended in the proposed rules. The amended values are taken from the same EPA guidance documents or comparative RACT rules used during the initial RACT analysis, as described below for each rule.

Advanced notice of rulemaking containing a draft of the Board memo and each rule was distributed to the Utah Manufacturers Association, the American Coatings Association, the local aerospace industry, and the Utah Auto Body Association.

<u>R307-335. Degreasing and Solvent Cleaning Operations.</u>
The emission control efficiency in this rule is already based on the overall system. EPA requested that we add the same testing and recordkeeping requirements inserted in the coating rules.

<u>R307-342. Adhesives and Sealants.</u>
The rule is based on the most current Ozone Transport Commission Model Rule which requires an overall capture and control efficiency of at least 85%.

R307-343. Emissions Standards for Wood Furniture Manufacturing Operations.
The RACT analysis was based on the EPA's Control Technology Guideline (CTG) document, *Control of Volatile Organic Compound Emissions from Wood Furniture Manufacturing Operations*, EPA 453/R-96-007, April 1996. The CTG provides a model rule but does not suggest a specific overall system efficiency value.

The San Joaquin Valley Air District rule 4606 was selected for the RACT comparative analysis. That rule requires an overall system efficiency of 85%. We are proposing the same 85% requirement.

R307-344. Paper, Film, and Foil Coatings.
The RACT analysis was based on the CTG, *Control Technologies Guidelines for Paper, Film, and Foil Coatings*, EPA 453/R-07-003, September 2007. EPA developed the recommendations in the 2007 CTG after reviewing an earlier CTG, the new source performance standards (NSPS), and national emission standards for hazardous air pollutants (NESHAP). Because this CTG is a comprehensive document, we are proposing to apply the CTG-recommended 90% overall system efficiency.

R307-345. Fabric and Vinyl Coatings.
The EPA CTG for this industry is aged; therefore, we consider other state rules more appropriate for our RACT analysis. The San Joaquin Valley Air Pollution Control District rule 4607 is a comparable rule with a requirement of 90% overall system efficiency.

R307-346. Metal Furniture Surface Coatings.
The RACT analysis was based on the CTG, *Control Technologies Guidelines for Metal Furniture Coatings*, EPA 453/R-07-005, September 2007. This guidance document provides a presumptive RACT. EPA developed the recommendations in the 2007 CTG after reviewing an earlier CTG, the NSPS, and NESHAP. Because this CTG is a comprehensive document, we are proposing to apply the CTG-recommended 90% overall system efficiency.

R307-347. Large Appliance Surface Coatings.
The RACT analysis was based on the CTG, *Control Technologies Guidelines for Large Appliance Coatings*, EPA 453/R-07-004, September 2007. EPA developed the recommendations in the 2007 CTG after reviewing an earlier CTG, the NSPS and NESHAP. Because this CTG is a comprehensive document, we are proposing to apply the CTG-recommended 90% overall system efficiency.

R307-348. Magnet Wire Coatings.
There is no CTG that directly applies to this industry; therefore, we relied on the South Coast Air Quality Management District rule 1126 for our comparative RACT analysis. That rule requires an overall system efficiency of 90%. We are proposing the same 90% requirement.

R307-349. Flat Wood Panel Coatings.
The RACT analysis was based on the CTG, *Control Technologies Guidelines for Flat Wood Paneling Coatings*, EPA 453/R-06-004, September 2006. The CTG recommends an overall system efficiency of 90%.

R307-350. Miscellaneous Metal Parts and Products Coatings.
The RACT analysis was based on the CTG, *Control Technologies Guidelines for Miscellaneous Metal and Plastic Parts Coatings*, EPA 453/R-08-003, September 2008. EPA developed the recommendations in the CTG based on a review of the former CTG, the 1988 NSPS, and the 2004 NESHAP. Because this CTG is a comprehensive document, we are proposing to apply the CTG-recommended 90% overall system efficiency.

R307-352. Metal Container, Closure, and Coil Coatings.
The RACT analysis was based on the CTG, *Surface Coating of Cans, Coils, Paper, Fabrics, Automobiles and Light-Duty Trucks*, EPA 450/2-77-008. The CTG provided a comparative analysis of existing rules, and based on that analysis, we used the Bay Area Air Quality Management District Regulation 8, Rule 11 as the primary reference source. The secondary source was Rule 1125 from the South Coast Air Quality Management District. We are proposing to apply the 90% requirement as per Regulation 8 Rule 11.

R307-353. Plastic Parts Coatings.
The RACT analysis was based on the CTG, *Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings* (EPA 453/R-08-003, September 2008) which contains information on plastic coating. We are proposing to apply the CTG-recommended 90% overall system efficiency.

R307-354. Automotive Refinishing Coatings.
The RACT analysis was based on the CTG, *Control Techniques Guideline for Reduction for Volatile Organic Compound Emissions from Automobile Refinishing* (EPA 450/3-88-009, 1988/10) and the Alternative Control Techniques Document, *Automotive Refinishing* (EPA 453/R-94-031, 1994/04). These documents do not provide a system efficiency recommendation; therefore, we are proposing to use a reasonable efficiency level of 90%, which is near the expected level of reduction by applying low-VOC coatings.

R307-355. Control of Emissions from Aerospace Manufacture and Rework Facilities.
The CTG, *Control of Volatile Organic Compound Emissions from Coating Operations at Aerospace manufacturing and rework Operations*, EPA-453/R-97-004, December 1997, page B-8, provides a model rule with a system efficiency of at least 81%. The San Joaquin Valley Air District rule 4605 was selected for the RACT comparative analysis. That rule requires a system efficiency of 85%. The Missouri rule 10CSR 10-5.295 was also used as a RACT comparative rule, and it requires the control system to reduce VOCs by 81%. Given the warehouse size operating areas common to these sources, it would be challenging at best to meet an efficiency value beyond 81%; therefore, we are proposing to apply the EPA guidance value and the Missouri RACT value of 81%.

Staff Recommendation: Staff recommends the Board propose R307-335; R307-342 through 350; and R307-352 through 355 for public comment.

R307. Environmental Quality, Air Quality.
R307-335. Degreasing and Solvent Cleaning Operations.
R307-335-1. Purpose.

The purpose of this rule is to limit volatile organic compound (VOC) emission from degreasing and solvent cleaning operations.

R307-335-2. Applicability.

R307-335 applies to all degreasing or solvent cleaning operations that use VOCs and that are located in PM10 and PM2.5 nonattainment and maintenance plan areas as defined in 40 CFR 81.345 (July 1, 2011).

R307-335-3. Definitions.

The following additional definitions apply to R307-335:

"Batch open top vapor degreasing" means the batch process of cleaning and removing grease and soils from metal surfaces by condensing hot solvent vapor on the colder metal parts.

"Cold cleaning" means the batch process of cleaning and removing soils from metal surfaces by spraying, brushing, flushing or immersing while maintaining the solvent below its boiling point.

"Conveyorized degreasing" means the continuous process of cleaning and removing greases and soils from metal surfaces by using either cold or vaporized solvents.

“Department of Defense military technical data” means a specification that specifies design requirements, such as materials to be used, how a requirement is to be achieved, or how an item is to be fabricated or constructed.

"Freeboard ratio" means the freeboard height (distance between solvent line and top of container)divided by the width of the degreaser.

"Industrial solvent cleaning" means operations performed using a liquid that contains any VOC, or combination of VOCs, which is used to clean parts, tools, machinery, equipment and work areas. Cleaning operations include, but are not limited to, spraying, wiping, flushing, and purging.

"Open top vapor degreaser" means the batch process of cleaning and removing soils from metal surfaces by condensing low solvent vapor on the colder metal parts.

"Separation operation" means any process that separates a mixture of compounds and solvents into two or more components. Specific mechanisms include extraction, centrifugation, filtration, and crystallization.

"Solvent metal cleaning" means the process of cleaning soils from metal surfaces by cold cleaning, open top vapor degreasers, or conveyorized degreasing.

R307-335-4. Cold Cleaning Facilities.

No owner or operator shall operate a degreasing or solvent cleaning operation unless conditions in R307-335-4(1) through (7) are met.

(1) A cover shall be installed which shall remain closed except during actual loading, unloading or handling of parts in cleaner. The cover shall be designed so that it can be easily operated with

one hand if:

(a) The volatility of the solvent is greater than 2 kPa (15 mm Hg or 0.3 psi) measured at 38 degrees C (100 degrees F),

(b) The solvent is agitated, or

(c) The solvent is heated.

(2) An internal draining rack for cleaned parts shall be installed on which parts shall be drained until all dripping ceases. If the volatility of the solvent is greater than 4.3 kPa (32 mm Hg at 38 degrees C (100 degrees F)), the drainage facility must be internal, so that parts are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

(3) Waste or used solvent shall be stored in covered containers.

(4) Tanks, containers and all associated equipment shall be maintained in good operating condition, and leaks shall be repaired immediately or the degreaser shall be shutdown.

(5) Written procedures for the operation and maintenance of the degreasing or solvent cleaning equipment shall be permanently posted in an accessible and conspicuous location near the equipment.

(6) If the solvent volatility is greater than 4.3 kPa (33 mm Hg or 0.6 psi) measured at 38 degrees C (100 degrees F), or if solvent is heated above 50 degrees C (120 degrees F), then one of the following control devices shall be used:

(a) Freeboard that gives a freeboard ratio greater than 0.7;

(b) Water cover if the solvent is insoluble in and heavier than water); or

(c) Other systems of equivalent control, such as a refrigerated chiller or carbon adsorption.

(7) If used, the solvent spray shall be a solid fluid stream at a pressure that does not cause excessive splashing and may not be a fine, atomized or shower type spray.

R307-335-5. Open Top Vapor Degreasers.

Owners or operators of open top vapor degreasers shall, in addition to meeting the requirements of R307-335-4(3), (4) and (5),

(1) Equip the vapor degreaser with a cover that can be opened and closed without disturbing the vapor zone. The cover shall be closed except when processing work loads through the degreaser;

(2) Install one of the following control devices:

(a) Equipment necessary to sustain:

(i) A freeboard ratio greater than or equal to 0.75, and

(ii) A powered cover if the degreaser opening is greater than 1 square meter (10.8 square feet),

(b) Refrigerated chiller,

(c) Enclosed design (cover or door opens only when the dry part is actually entering or exiting the degreaser),

(d) Carbon adsorption system, with ventilation greater than or equal to 15 cubic meters per minute per square meter (50 cubic feet per minute per square foot) of air/vapor area when cover is open and exhausting less than 25 parts per million of solvent averaged over one complete adsorption cycle;

(3) Minimize solvent carryout by:

(a) Racking parts to allow complete drainage,
(b) Moving parts in and out of the degreaser at less than 3.3 meters per minute (11 feet per minute),
(c) Holding the parts in the vapor zone at least 30 seconds or until condensation ceases,
(d) Tipping out any pool of solvent on the cleaned parts before removal, and
(e) Allowing the parts to dry within the degreaser for at least 15 seconds or until visibly dry.
(4) Spray parts only in or below the vapor level;
(5) Not use ventilation fans near the degreaser opening, nor provide exhaust ventilation exceeding 20 cubic meters per minute per square meter (65 cubic feet per minute per square foot) in degreaser open area, unless necessary to meet state and federal occupational, health, and safety requirements.
(6) Not degrease porous or absorbent materials, such as cloth, leather, wood or rope;
(7) Not allow work loads to occupy more than half of the degreaser's open top area;
(8) Ensure that solvent is not visually detectable in water exiting the water separator;
(9) Install safety switches on the following:
(a) Condenser flow switch and thermostat (shuts off sump heat if condenser coolant is either not circulating or too warm); and
(b) Spray switch (shuts off spray pump if the vapor level drops excessively, i.e., greater than 10 cm (4 inches).
(10) Open top vapor degreasers with an open area smaller than one square meter (10.8 square feet) are exempt from R307-335-5(2)(b) and (d).

R307-335-6. Conveyorized Degreasers.

Owners and operators of conveyorized degreasers shall, in addition to meeting the requirements of R307-335-4(3), (4) and (5) and R307-335-5(5):
(1) Install one of the following control devices for conveyorized degreasers with an air/vapor interface equal to or greater than two square meters (21.5 square feet):
(a) Refrigerated chiller; or
(b) Carbon adsorption system, with ventilation greater than or equal to 15 cubic meters per minute per square meter (50 cubic feet per minute per square foot) of air/vapor area when downtime covers are open, and exhausting less than 25 parts per million of solvent, by volume, averaged over a complete adsorption cycle.
(2) Equip the cleaner with equipment, such as a drying tunnel or rotating (tumbling) basket, sufficient to prevent cleaned parts from carrying out solvent liquid or vapor.
(3) Provide downtime covers for closing off the entrance and exit during shutdown hours. Ensure that down-time cover is placed over entrances and exits of conveyorized degreasers immediately after the conveyor and exhaust are shut down and is removed just before they are started up.
(4) Minimize carryout emissions by racking parts for best

drainage and maintaining the vertical conveyor speed at less than 3.3 meters per minute (11 feet per minute).

(5) Minimize openings: Entrances and exits should silhouette work loads so that the average clearance (between parts and the edge of the degreaser opening) is either less than 10 cm (4 inches) or less than 10% of the width of the opening.

(6) Install safety switches on the following:

(a) Condenser flow switch and thermostat - shuts off sump heat if coolant is either not circulating or too warm;

(b) Spray switch - shuts off spray pump or conveyor if the vapor level drops excessively, i.e., greater than 10 cm or (4 inches); and

(c) Vapor level control thermostat - shuts off sump level if vapor level rises too high.

(7) Ensure that solvent is not visibly detectable in the water exiting the water separator.

R307-335-7. Industrial Solvent Cleaning.

(1) Exemptions. The requirements of R307-335-7 do not apply to aerospace, wood furniture, shipbuilding and repair, flat wood paneling, large appliance, metal furniture, paper film and foil, plastic parts, miscellaneous metal parts coatings and light autobody and truck assembly coatings, flexible packaging, lithographic and letterpress printing materials, fiberglass boat manufacturing materials, and operations that are exclusively covered by Department of Defense military technical data and performed by a Department of Defense contractor and/or on site at installations owned and/or operated by the United States Armed Forces.

(2) Operators of industrial solvent cleaning that emit 15 pounds of VOCs or more per day from industrial solvent cleaning operations, shall reduce VOC emissions from the use, handling, storage, and disposal of cleaning solvents and shop towels by implementing the following work practices:

(a) Covering open containers; and

(b) Storing used applicators and shop towels in closed fire proof containers, and

(c) Limiting VOC emissions by either:

(i) Using solvents with a VOC limit in Table 1; or

(ii) Installing an emission control system designed to have an overall capture and control efficiency of at least 85%.

TABLE 1
Solvent Cleaning VOC Limits

Solvent Cleaning Category	VOC Limit (lb/gal)
Coatings, adhesives & ink manufacturing	4.2
Electronic parts & components	4.2
General miscellaneous cleaning	2.5
Medical devices and pharmaceutical	
Tools, equipment & machinery	6.7
General surface cleaning	5.0
Screening printing operations	4.2
Semiconductor tools, maintenance & equipment	

Cleaning 6.7

R307-335-8. Add-on Emission Control Systems Operations.

[~~(1) The owner or operator of a control device shall maintain certification from the manufacturer that the emission control system will attain at least 85% overall efficiency performance and make the certification available to the director upon request.~~

~~(2) Emission control systems shall be operated and maintained in accordance with the manufacturer recommendations to maintain at least 85% overall efficiency performance. The owner or operator shall maintain for a minimum of two years records of operating and maintenance sufficient to demonstrate that the equipment is being operated and maintained in accordance with the manufacturer recommendations.~~]

(1)Determination of overall capture and control efficiency shall be determined using EPA approved methods, as follows.

(a) The capture efficiency of a VOC emission control system's VOC collection device shall be determined according to EPA's "Guidelines for Determining Capture Efficiency," January 9, 1995 and 40 CFR Part 51, Appendix M, Methods 204-204F, as applicable.

(b) The control efficiency of a VOC emission control system's VOC control device shall be determined using test methods in Appendices A-1, A-6, and A-7 to 40 CFR Part 60, for measuring flow rates, total gaseous organic concentrations, or emissions of exempt compounds, as applicable.

(c) An alternative test method may be substituted for the preceding test methods after review and approval by the EPA Administrator.

(2)The owner or operator of a control system shall provide documentation that the emission control system will attain the requirements of R307-335-7(2)(c)(ii).

(3) The owner or operator shall maintain records of key system parameters necessary to ensure compliance with R307-335-7. Key system parameters may include, but are not limited to, temperature, pressure and flow rates. Operator inspection schedule, monitoring, recordkeeping, and key parameters shall be in accordance with the manufacturer's recommendations, and as required to demonstrate operations are providing continuous emission reduction from the source during all periods that the operations cause emissions from the source.

(4) The owner or operator shall maintain for a minimum of two years records of operating and maintenance sufficient to demonstrate that the equipment is being operated and maintained in accordance with the manufacturer recommendations.

[~~**R307-335-9. Recordkeeping.**~~

~~The owner or operator shall maintain, for a minimum of two years, records of the solvent VOC content applied and the physical characteristics that demonstrate compliance with R307-335.~~

~~**R307-335-10. Compliance Schedule.**~~

~~(1) All sources shall be in compliance with R307-335-7 by August 1, 2014.~~]

KEY: air pollution, degreasing, solvent cleaning
Date of Enactment or Last Substantive Amendment: 2014
Notice of Continuation: February 1, 2012
Authorizing, and Implemented or Interpreted Law: 19-2-104(1)(a)

R307. Environmental Quality, Air Quality.
R307-342. Adhesives and Sealants.
R307-342-1. Purpose.

The purpose of this rule is to limit emissions of volatile organic compounds (VOCs) from adhesives, sealants, primers and cleaning solvents.

R307-342-2. Applicability.

Beginning September 1, 2014, R307-342 applies to any person who manufactures any adhesive, sealant, adhesive primer or sealant primer in Box Elder, Cache, Davis, Salt Lake, Utah or Weber counties and to any person who sells, supplies, or applies any adhesive, sealant, adhesive primer or sealant primer in Box Elder, Cache, Davis, Salt Lake, Tooele, Utah or Weber counties manufactured on or after September 1, 2014.

R307-342-3. Exemptions.

(1) The requirements of R307-342 do not apply to the following:

(a) Adhesives, sealants, adhesive primers or sealant primers being tested or evaluated in any research and development, quality assurance or analytical laboratory;

(b) Adhesives and sealants that contain less than 20 grams of VOC per liter of adhesive or sealant, less water and exempt solvents, as applied;

(c) Cyanoacrylate adhesives;

(d) Adhesives, sealants, adhesive primers or sealant primers that are sold or supplied by the manufacturer or supplier in containers with a net volume of 16 fluid ounces or less or that have a net weight of one pound or less, except plastic cement welding adhesives and contact adhesives;

(e) Contact adhesives that are sold or supplied by the manufacturer or supplier in containers with a net volume of one gallon or less;

(f) Aerosol adhesives and primers dispensed from aerosol spray cans; or

(g) Polyester bonding putties to assemble fiberglass parts at fiberglass boat manufacturing facilities and at other reinforced plastic composite manufacturing facilities.

(2) The requirements of R307-342 do not apply to the use of adhesives, sealants, adhesive primers, sealant primers, surface preparation and cleanup solvents in the following operations:

(a) Tire repair operations, provided the label of the adhesive states "for tire repair only;"

(b) In the production, rework, repair, or maintenance of aerospace vehicles and components, and undersea-based weapon systems;

(c) In the manufacture of medical equipment;

(d) Operations that are exclusively covered by Department of Defense military technical specifications and standards and performed by a Department of Defense contractor and/or on site at installations owned and/or operated by the United States Armed Forces.

(e) Plaque laminating operations in which adhesives are used

to bond clear, polyester acetate laminate to wood with lamination equipment installed prior to July 1, 1992.

(3) The requirements of R307-342 do not apply to commercial and industrial operations if the total VOC emissions from all adhesives, sealants, adhesive primers and sealant primers used at the source are less than 200 pounds per calendar year.

(4) Adhesive products and sealant products shipped, supplied or sold exclusively outside of the areas specified in R307-342-2 are exempt from the requirements of this rule.

(5) R307-342 shall not apply to any adhesive, sealant, adhesive primer or sealant primer products manufactured for shipment and use outside of the counties specified R307-342-2 as long as the manufacturer or distributor can demonstrate both that the product is intended for shipment and use outside of the applicable counties and that the manufacturer or distributor has taken reasonable prudent precautions to assure that the product is not distributed to the applicable counties.

(6) R307-342 shall not apply to the use of any adhesives, sealants, adhesive primers, sealant primers, cleanup solvents and surface preparation solvents, provided the total volume of noncomplying adhesives, sealants, primers, cleanup and surface preparation solvents applied facility-wide does not exceed 55 gallons per rolling 12-month period.

(7) Commercial and industrial operations claiming exemption pursuant to R307-342-3 shall record and maintain operational records sufficient to demonstrate compliance.

R307-342-4. Definitions.

The following additional definitions apply to R307-342:

"Acrylonitrile-butadiene-styrene (ABS) welding adhesive" means any adhesive intended by the manufacturer to weld acrylonitrile-butadiene-styrene pipe, which is made by reacting monomers of acrylonitrile, butadiene and styrene.

"Adhesive" means any chemical substance that is applied for the purpose of bonding two surfaces together other than by mechanical means.

"Adhesive primer" means any product intended by the manufacturer for application to a substrate, prior to the application of an adhesive, to provide a bonding surface.

"Aerospace component" means a fabricated part, assembled part, or completed unit, including passenger safety equipment, of any aircraft, helicopter, missile or space vehicle.

"Architectural sealant or primer" means any sealant or sealant primer intended by the manufacturer to be applied to stationary structures, including mobile homes and their appurtenances. Appurtenances to an architectural structure include, but are not limited to: hand railings, cabinets, bathroom and kitchen fixtures, fences, rain gutters and downspouts, and windows.

"Automotive glass adhesive primer" means an adhesive primer labeled by the manufacturer to be applied to automotive glass prior to installation of the glass using an adhesive or sealant.

"Ceramic tile installation adhesive" means any adhesive intended by the manufacturer for use in the installation of ceramic tiles.

"Chlorinated polyvinyl chloride plastic (CPVC) plastic" means a polymer of the vinyl chloride monomer that contains 67% chlorine and is typically identified with a CPVC marking.

"Chlorinated polyvinyl chloride (CPVC) welding adhesive" means an adhesive labeled for welding of chlorinated polyvinyl chloride plastic.

"Cleanup solvent" means a VOC-containing material used either to remove a loosely held uncured (i.e., not dry to the touch) adhesive or sealant from a substrate or to clean equipment used in applying a material.

"Computer diskette jacket manufacturing adhesive" means any adhesive intended by the manufacturer to glue the fold-over flaps to the body of a vinyl computer diskette jacket.

"Contact bond adhesive" means an adhesive that:

(1) is designed for application to both surfaces to be bonded together;

(2) is allowed to dry before the two surfaces are placed in contact with each other;

(3) forms an immediate bond that is impossible, or difficult, to reposition after both adhesive-coated surfaces are placed in contact with each other; and

(4) does not need sustained pressure or clamping of surfaces after the adhesive-coated surfaces have been brought together using sufficient momentary pressure to establish full contact between both surfaces.

"Contact adhesive" means an adhesive that feels dry to the touch and bonds instantly. Contact adhesives do not include rubber cements that are primarily intended for use on paper substrates and vulcanizing fluids that are designed and labeled for tire repair only.

"Cove base" means a flooring trim unit, generally made of vinyl or rubber, having a concave radius on one edge and a convex radius on the opposite edge that is used in forming a junction between the bottom wall course and the floor or to form an inside corner.

"Cove base installation adhesive" means any adhesive intended by the manufacturer to be used for the installation of cove base or wall base on a wall or vertical surface at floor level.

"Cyanoacrylate adhesive" means any adhesive with a cyanoacrylate content of at least 95% by weight.

"Department of Defense military technical data" means a specification that specifies design requirements, such as materials to be used, how a requirement is to be achieved, or how an item is to be fabricated or constructed.

"Enclosed cleaning system" means a cleaner consisting of a closed container with a door or top that can be opened and closed and fitted with cleaning connections. A spray gun is attached to the enclosed cleaning system by a connection, and solvent is pumped through the gun to clean it. The cleaning solvent falls back into the cleaning system's solvent reservoir for recirculation.

"Flexible vinyl" means non-rigid polyvinyl chloride plastic with

at least 5% by weight plasticizer content.

"Fiberglass" means a material consisting of extremely fine glass fibers.

"Indoor floor covering installation adhesive" means any adhesive intended by the manufacturer for use in the installation of wood flooring, carpet, resilient tile, vinyl tile, vinyl backed carpet, resilient sheet and roll or artificial grass. Adhesives used to install ceramic tile and perimeter bonded sheet flooring with vinyl backing onto a non-porous substrate, such as flexible vinyl, are excluded from this category.

"Laminate" means a product made by bonding together two or more layers of material.

"Marine deck sealant" or "marine deck sealant primer" means any sealant or sealant primer labeled for application to wooden marine decks.

"Medical equipment manufacturing" means the manufacture of medical devices, such as, but not limited to, catheters, heart valves, blood cardioplegia machines, tracheostomy tubes, blood oxygenators, and cardiatory reservoirs.

"Metal to urethane/rubber molding or casting adhesive" means any adhesive intended by the manufacturer to bond metal to high density or elastomeric urethane or molded rubber materials, in heater molding or casting processes, to fabricate products such as rollers for computer printers or other paper handling equipment.

"Multipurpose construction adhesive" means any adhesive intended by the manufacturer for use in the installation or repair of various construction materials, including but not limited to drywall, subfloor, panel, fiberglass reinforced plastic (FRP), ceiling tile and acoustical tile.

"Nonmembrane roof installation/repair adhesive" means any adhesive intended by the manufacturer for use in the installation or repair of nonmembrane roofs and that is not intended for the installation of prefabricated single-ply flexible roofing membrane, including, but not limited to, plastic or asphalt roof cement, asphalt roof coating and cold application cement.

"Outdoor floor covering installation adhesive" means any adhesive intended by the manufacturer for use in the installation of floor covering that is not in an enclosure and that is exposed to ambient weather conditions during normal use.

"Panel installation" means the installation of plywood, pre-decorated hardboard (or tileboard), fiberglass reinforced plastic, and similar pre-decorated or non-decorated panels to studs or solid surfaces using an adhesive formulated for that purpose.

"Perimeter bonded sheet flooring installation" means the installation of sheet flooring with vinyl backing onto a nonporous substrate using an adhesive designed to be applied only to a strip of up to four inches wide around the perimeter of the sheet flooring.

"Plastic cement welding adhesive" means any adhesive intended by the manufacturer for use to dissolve the surface of plastic to form a bond between mating surfaces.

"Plastic cement welding adhesive primer" means any primer

intended by the manufacturer for use to prepare plastic substrates prior to bonding or welding.

"Plasticizer" means a material such as a high boiling point organic solvent that is incorporated into a vinyl to increase its flexibility, workability, or distensibility, as determined by ASTM Method E-260-96.

"Polyvinyl chloride (PVC) plastic" means a polymer of the chlorinated vinyl monomer that contains 57% chlorine.

"Polyvinyl chloride welding adhesive" or "PVC welding adhesive" means any adhesive intended by the manufacturer for use in the welding of PVC plastic pipe.

"Porous material" means a substance that has tiny openings, often microscopic, in which fluids may be absorbed or discharged, including, but not limited to, wood, paper and corrugated paperboard.

"Roadway sealant" means any sealant intended by the manufacturer for application to public streets, highways and other surfaces, including but not limited to curbs, berms, driveways and parking lots.

"Rubber" means any natural or manmade rubber substrate, including styrene-butadiene rubber, polychloroprene (neoprene), butyl rubber, nitrile rubber, chlorosulfonated polyethylene and ethylene propylene diene terpolymer.

"Sealant primer" means any product intended by the manufacturer for application to a substrate, prior to the application of a sealant, to enhance the bonding surface.

"Sealant" means any material with adhesive properties, including sealant primers and caulks, that is formulated primarily to fill, seal, waterproof or weatherproof gaps or joints between two surfaces.

"Sheet-applied rubber installation" means the process of applying sheet rubber liners by hand to metal or plastic substrates to protect the underlying substrate from corrosion or abrasion. These operations also include laminating sheet rubber to fabric by hand.

"Single-ply roof membrane" means a prefabricated single sheet of rubber, normally ethylene-propylenediene terpolymer, that is field applied to a building roof using one layer of membrane material.

"Single-ply roof membrane installation and repair adhesive" means any adhesive labeled for use in the installation or repair of single-ply roof membrane.

(1) Installation includes, as a minimum, attaching the edge of the membrane to the edge of the roof and applying flashings to vents, pipes and ducts that protrude through the membrane.

(2) Repair includes gluing the edges of torn membrane together, attaching a patch over a hole and reapplying flashings to vents, pipes or ducts installed through the membrane.

"Single-ply roof membrane adhesive primer" means any primer labeled for use to clean and promote adhesion of the single-ply roof membrane seams or splices prior to bonding.

"Single-ply roof membrane sealant" means any sealant labeled for application to single-ply roof membrane.

"Structural glazing adhesive" means any adhesive intended by the manufacturer to apply glass, ceramic, metal, stone or composite panels to exterior building frames.

"Subfloor installation" means the installation of subflooring material over floor joists, including the construction of any load bearing joists. Subflooring is covered by a finish surface material.

"Surface preparation solvent" means a solvent used to remove dirt, oil and other contaminants from a substrate prior to the application of a primer, adhesive or sealant.

"Thin metal laminating adhesive" means any adhesive intended by the manufacturer for use in bonding multiple layers of metal to metal or metal to plastic in the production of electronic or magnetic components in which the thickness of the bond line is less than 0.25 mils.

"Tire repair" means a process that includes expanding a hole, tear, fissure or blemish in a tire casing by grinding or gouging, applying adhesive, and filling the hole or crevice with rubber.

"Traffic marking tape" means preformed reflective film intended by the manufacturer for application to public streets, highways and other surfaces, including curbs, berms, driveways and parking lots.

"Traffic marking tape adhesive primer" means any primer intended by the manufacturer for application to surfaces prior to installation of traffic marking tape.

"Undersea-based weapons systems components" means the fabrication of parts, assembly of parts or completed units of any portion of a missile launching system used on undersea ships.

"Waterproof resorcinol glue" means a two-part resorcinol-resin-based adhesive designed for applications where the bond line must be resistant to conditions of continuous immersion in fresh or salt water.

R307-342-5. [~~Emission Standards~~]VOC Content Limits.

(1) Beginning September 1, 2014, no person shall manufacturer any adhesive, sealant, adhesive primer or sealant primer with a VOC content in excess of the limits in Table 1.

(2) Beginning September 1, 2014, no person shall sell supply or offer for sale any adhesive, sealant, adhesive primer or sealant primer with a VOC content in excess of the limits in Table 1 and that was manufactured on or after September 1, 2014.

(3) Beginning September 1, 2014, no person shall apply any adhesive, sealant, adhesive primer or sealant primer with a VOC content in excess of the limits in Table 1 unless that person uses an add-on control device as specified in R307-342-8 or unless the adhesive, sealant, adhesive primer or sealant primer was manufactured before September 1, 2014.

(4) The VOC content limits in Table 1 for adhesives applied to particular substrates shall apply as follows:

(a) If a person uses an adhesive or sealant subject to a specific VOC content limit for such adhesive or sealant in Table 1, such specific limit is applicable rather than an adhesive-to-substrate limit; and

(b) If an adhesive is used to bond dissimilar substrates together, the applicable substrate category with the highest VOC content shall be the limit for such use.

TABLE 1

VOC Content Limits for Adhesives, Sealants, Adhesive Primers, Sealant Primers and Adhesives Applied to Particular Substrates (minus water and exempt compounds (compounds that are not defined as VOC), as applied

Adhesive, Sealant, Adhesive Primer Category	VOC Content Limit (grams VOC/liter)
Adhesives	
ABS welding	400
Ceramic tile installation	130
Computer diskette jacket manufacturing	850
Contact bond	250
Cove base installation	150
CPVC welding	490
Indoor floor covering installation	150
Metal to urethane/rubber molding or casting	850
Multipurpose construction	200
Nonmembrane roof installation/repair	300
Other plastic cement welding	510
Outdoor floor covering installation	250
PVC welding	510
Single-ply roof membrane installation/repair	250
Structural glazing	100
Thin metal laminating	780
Tire retread	100

Perimeter bonded sheet vinyl flooring installation	660
Waterproof resorcinol glue	170
Sheet-applied rubber installation	850
Sealants	
Architectural	250
Marine deck	760
Nonmembrane roof installation/repair	300
Roadway	250
Single-ply roof membrane	450
Other	420
Adhesive Primers	
Automotive glass	700
Plastic cement welding	650
Single-ply roof membrane	250
Traffic marking tape	150
Other	250
Sealant Primers	
Non-porous architectural	250
Porous architectural	775
Marine deck	760
Other	750
Adhesives Applied to the Listed Substrate	
Flexible vinyl	250
Fiberglass	200

Metal	30
Porous material	120
Rubber	250
Other substrates	250

R307-342-6. Application Equipment.

(1) An operator shall only use the following equipment to apply adhesives and sealants:

(a) Electrostatic application;

(b) Flow coater;

(c) Roll coater;

(d) Dip coater;

(e) Hand application method;

(f) Airless spray and air-assisted airless spray;

(g) High volume, low pressure spray equipment operated in accordance with the manufacturers specifications; or

(h) Other methods having a minimum 65% transfer efficiency.

(2) Removal of an adhesive, sealant, adhesive primer or sealant primer from the parts of spray application equipment shall be performed as follows:

(a) In an enclosed cleaning system;

(b) Using a solvent with a VOC content less than or equal to 70 grams of VOC per liter of material; or

(c) Parts containing dried adhesive may be soaked in a solvent if the composite vapor pressure of the solvent, excluding water and exempt compounds, is less than or equal to 9.5 mm Hg at 20 degrees Celsius and the parts and solvent are in a closed container that remains closed except when adding parts to or removing parts from the container.

R307-342-7. Administrative Requirements.

(1) Each person that manufactures adhesives, sealants, and adhesive primers subject to this rule shall maintain records demonstrating compliance.

(2) Commercial and industrial operations that are not exempt under R307-342-3 shall maintain records demonstrating compliance with this rule, including:

(a) A list of each adhesive, sealant, adhesive primer, sealant primer cleanup solvent and surface preparation solvent in use and in storage;

(b) A material data sheet for each adhesive, sealant, adhesive primer, sealant primer, cleanup solvent and surface preparation solvent;

(c) A list of catalysts, reducers or other components used and the mix ratio;

(d) The VOC content or vapor pressure, as applied; and

(e) The monthly volume of each adhesive, sealant, adhesive primer, sealant primer cleanup solvent and surface preparation solvent

used.

(2) Except as provided in R307-342-6(2), no person shall use materials containing VOCs for the removal of adhesives, sealants, or adhesive or sealant primers from surfaces, other than spray application equipment, unless the composite vapor pressure of the solvent used is less than 45 mm Hg at 20 degrees Celsius.

R307-342-8. ~~Optional~~ Add-On Controls Systems Operations.

[~~(1) VOC emissions from the manufacturer or use of all adhesives, sealants, adhesive primers or sealant primers subject to this rule shall be reduced by an overall capture and control efficiency of at least 85% by weight.~~

~~(2) The owner or operator of an emission control system shall provide documentation that the emissions control system will attain the requirements of R307-342-8.~~

~~(3) The owner or operator of an emission control system shall maintain for a minimum of two years records of operating and maintenance sufficient to demonstrate that the equipment is being operated and maintained in accordance with the manufacturer recommendations.~~]

(1) The owner or operator shall install and maintain an incinerator, carbon adsorption, or any other add-on emission control system, provided that the emission control system is operated and maintained in accordance with the manufacturer recommendations in order to maintain at least 85% capture and control efficiency. Determination of overall capture and control efficiency shall be determined using EPA approved methods, as follows.

(a) The capture efficiency of a VOC emission control system's VOC collection device shall be determined according to EPA's "Guidelines for Determining Capture Efficiency," January 9, 1995 and 40 CFR Part 51, Appendix M, Methods 204-204F, as applicable.

(b) The control efficiency of a VOC emission control system's VOC control device shall be determined using test methods in Appendices A-1, A-6, and A-7 to 40 CFR Part 60, for measuring flow rates, total gaseous organic concentrations, or emissions of exempt compounds, as applicable.

(c) An alternative test method may be substituted for the preceding test methods after review and approval by the EPA Administrator.

(2) The owner or operator of a control system shall provide documentation that the emission control system will attain the requirements of R307-342-8(1).

(3) The owner or operator shall maintain records of key system parameters necessary to ensure compliance with R307-342-8. Key system parameters may include, but are not limited to, temperature, pressure and flow rates. Operator inspection schedule, monitoring, recordkeeping, and key parameters shall be in accordance with the manufacturer's recommendations, and as required to demonstrate operations are providing continuous emission reduction from the source during all periods that the operations cause emissions from the source.

(4) The owner or operator shall maintain for a minimum of two

years records of operating and maintenance sufficient to demonstrate that the equipment is being operated and maintained in accordance with the manufacturer recommendations.

R307-342-9. Container Labeling.

Each manufacturer of an adhesive, sealant, adhesive primer or sealant primer subject to this rule shall display the following information on the product container or label:

(1) A statement of the manufacture's recommendation regarding thinning, reducing, or mixing of the product.

(a) R307-342-9 does not apply to the thinning of a product with water.

(b) If the thinning of the product prior to use is not necessary, the recommendation shall specify that the product is to be applied without thinning.

(2) The maximum or the actual VOC content of the product in accordance with Table 1, as supplied, displayed in grams of VOC per liter of product; and

(3) The maximum or the actual VOC content of the product in accordance with Table 1, which includes the manufacture's maximum recommendation for thinning, as applied, displayed in grams of VOC per liter of product.

KEY: air pollution, adhesives, sealants, primers
Date of Enactment or Last Substantive Amendment: [~~August 1, 2013~~]2014
Authorizing, and Implemented or Interpreted Law: 19-2-104(1)(a)

R307. Environmental Quality, Air Quality.
R307-343. Emissions Standards for Wood Furniture Manufacturing Operations.
R307-343-1. Purpose.

The purpose of R307-343 is to limit volatile organic compound (VOC) emissions from wood furniture manufacturing.

R307-343-2. Applicability.

R307-343 applies to wood furniture manufacturing operations, including related cleaning activities, that have the potential to emit 2.7 tons or more per year of VOCs and that are located in Box Elder, Cache, Davis, Salt Lake, Utah, Tooele, and Weber counties.

R307-343-3. Definitions.

The following additional definitions apply to R307-343:

"Affected source" means a wood furniture manufacturing source that meets the criteria in R307-343-2.

"As applied" means the volatile organic compound and solids content of the finishing material that is actually used for coating the substrate. It includes the contribution of materials used for in-house dilution of the finishing material.

"Coating" means a protective, decorative, or functional material applied in a thin layer to a surface. Such materials may include paints, topcoats, varnishes, sealers, stains, washcoats, basecoats, inks, and temporary protective coatings.

"Compliant coating" means a finishing material or strippable booth coating that meets the emission limits specified in R307-343-4(1).

"Control system" means the combination of capture and control devices used to reduce emissions to the atmosphere.

"Conventional Air Spray" means a spray coating method in which the coating is atomized by mixing it with compressed air at an air pressure greater than ten pounds per square inch (gauge) at the point of atomization. Airless, air assisted airless spray technologies, and electrostatic spray technology are not considered conventional air spray.

"Finishing material" means a coating used in the wood furniture industry, including basecoats, stains, washcoats, sealers, and topcoats.

"Finishing Operation" means those activities in which a finishing material is applied to a substrate and is subsequently air-dried, cured in an oven, or cured by radiation.

"Sealer" means a finishing material used to seal the pores of a wood substrate before additional coats of finishing material are applied. A washcoat used to optimize aesthetics is not a sealer.

"Solids" means the part of the coating that remains after the coating is dried or cured; solids content is determined using data from EPA Method 24.

"Stain" means any color coat having a solids content by weight of no more than 8.0% that is applied in single or multiple coats directly to the substrate, including nongrain raising stains, equalizer stains, sap stains, body stains, no-wipe stains, penetrating

stains, and toners.

"Topcoat" means the last film-building finishing material applied in a finishing system. Non-permanent final finishes are not topcoats.

"Touch-up and Repair" means the application of finishing materials to cover minor finishing imperfections.

"Washcoat" means a transparent special purpose coating having a solids content by weight of 12.0% or less that is applied over initial stains to protect and control color and to stiffen the wood fibers in order to aid sanding.

"Washoff operations" means those operations in which organic solvent is used to remove coating from a substrate.

"Wood furniture" means any product made of wood, a wood product such as rattan or wicker, or an engineered wood product such as particleboard that is manufactured under any of the following standard industrial classification codes: 2434, 2511, 2512, 2517, 2519, 2521, 2531, 2541, 2599, or 5712.

"Wood furniture manufacturing operations" means the finishing, cleaning, and washoff operations associated with the production of wood furniture or wood furniture components.

R307-343-4. [~~Emission Standards~~]VOC Content Limits.

(1) Each affected source subject to R307-343 shall limit VOC emissions by:

(a) Using the compliant coating method as described in R307-343-4(1)(a)(i) or using the control system method as described in R307-343-4(1)(a)(ii).

(i) Compliant coating method is the use of the topcoats or topcoat/sealer combinations in Table 1:

TABLE 1

Compliant Coating VOC Limitations
(values in pounds VOC per pound of solids, minus water and exempt solvents (compounds not classified as VOC), as applied)

COATING CATEGORY	VOC Content Limitations	
	Effective Through December 31,2014	Effective Beginning January 1, 2015
Topcoats	0.8	0.4
Topcoat/Sealer combination		
Topcoat	1.8	0.9
Sealer	1.9	0.9
Acid-cured, alkyd amino topcoat/sealer combinations		

Acid-cured, alkyd amino topcoat	2.0	1.0
Acid-cured, alkyd amino vinyl Sealer	2.3	1.2

(ii) Control system method is the use of a VOC control system achieving a [~~90~~]85% or greater emissions reduction.

(b) Using strippable spray booth coatings that contain no greater than 0.8 pounds VOC per pound solids as applied.

(c) Using closed containers for the storing of finishing, gluing, cleaning and washoff materials.

R307-343-5. Application Equipment Requirements.

(1) All coatings shall be applied using equipment having a minimum 65% transfer efficiency, except as allowed under R307-343-5(3) and operated according to the equipment manufacturer specifications. Equipment meeting the transfer efficiency requirement includes:

(a) Brush, dip, or roll coating;

(b) Electrostatic application; and

(c) High volume, low pressure (HVLP) spray equipment.

(2) Other coating application methods that achieve transfer efficiency equivalent to HVLP or electrostatic spray application methods may be used.

(3) Conventional air spray methods may be used under the following circumstances:

(a) To apply finishing materials that have no greater than 1.0 pound of VOC per pound of solids, as applied;

(b) For touch-up and repair under the following circumstances:

(i) The touchup and repair occurs after completion of the finishing operation; or

(ii) The touchup and repair occurs after the application of stain and before the application of any other type of finishing material, and the materials used for touchup and repair are applied from a container that has a volume of no more than 2.0 gallons;

(c) When the spray gun is aimed and triggered automatically, not manually;

(d) When the emissions from the finishing application station are directed to a control device;

(e) When the conventional air gun is used to apply finishing materials and the cumulative total usage of that finishing material is no more than 10% of the total gallons of finishing material used during the calendar year; or

(f) When the conventional air gun is used to apply stain on a part for which it is technically or economically infeasible to use any other spray application technology. The following criteria shall be used, either independently or in combination, to support the affected source's claim of technical or economic infeasibility:

(i) The production speed is too high or the part shape is too complex for one operator to coat the part and the application station is not large enough to accommodate an additional operator; or

(ii) The excessively large vertical spray area of the part makes it difficult to avoid sagging or runs in the stain.

R307-343-6. [~~Control Systems Operations~~]Add-on Controls Systems Operations.

[~~(1) Emission control systems shall be operated and maintained in accordance with the manufacturer recommendations in order to maintain 90% or greater continuous emission reduction.~~

~~(2) The owner or operator of a control device shall provide documentation that the emission control system will attain the requirements of R307-343-4 and R307-343-5.~~

~~(3) The owner or operator shall maintain for a minimum of two years records of operating and maintenance sufficient to demonstrate that the equipment is being operated and maintained in accordance with the manufacturer recommendations.~~]

(1) The owner or operator shall install and maintain an incinerator, carbon adsorption, or any other add-on emission control system, provided that the emission control system is operated and maintained in accordance with the manufacturer recommendations in order to maintain at least 85% capture and control efficiency. Determination of overall capture and control efficiency shall be determined using EPA approved methods, as follows.

(a) The capture efficiency of a VOC emission control system's VOC collection device shall be determined according to EPA's "Guidelines for Determining Capture Efficiency," January 9, 1995 and 40 CFR Part 51, Appendix M, Methods 204-204F, as applicable.

(b) The control efficiency of a VOC emission control system's VOC control device shall be determined using test methods in Appendices A-1, A-6, and A-7 to 40 CFR Part 60, for measuring flow rates, total gaseous organic concentrations, or emissions of exempt compounds, as applicable.

(c) An alternative test method may be substituted for the preceding test methods after review and approval by the EPA Administrator.

(2) The owner or operator of a control system shall provide documentation that the emission control system will attain the requirements of R307-343-6(1).

(3) The owner or operator shall maintain records of key system parameters necessary to ensure compliance with R307-343-6. Key system parameters may include, but are not limited to, temperature, pressure and flow rates. Operator inspection schedule, monitoring, recordkeeping, and key parameters shall be in accordance with the manufacturer's recommendations, and as required to demonstrate operations are providing continuous emission reduction from the source during all periods that the operations cause emissions from the source.

(4) The owner or operator shall maintain for a minimum of two years records of operating and maintenance sufficient to demonstrate that the equipment is being operated and maintained in accordance with the manufacturer recommendations.

R307-343-7. Work Practices and Recordkeeping.

(1) Control techniques and work practices shall be implemented at all times to reduce VOC emissions from fugitive type sources.

Control techniques and work practices shall include:

(a) Storing all VOC-containing coatings, thinners, and coating-related waste materials in closed containers;

(b) Ensuring that mixing and storage containers used for VOC-containing coatings, thinners, and coating-related waste material are kept closed at all times except when depositing or removing these materials;

(c) Minimizing spills of VOC-containing coatings, thinners, and coating-related waste materials; and

(d) Conveying VOC-containing coatings, thinners, and coating-related waste materials from one location to another in closed containers or pipes.

(2) The work practices for cleaning materials shall be implemented at all times to reduce VOC emissions from fugitive type sources. The work practices shall include:

(a) Storing all VOC-containing cleaning materials and used shop towels in closed containers;

(b) Ensuring that storage containers used for VOC-containing cleaning materials are kept closed at all times except when depositing or removing these materials;

(c) Minimizing spills of VOC-containing cleaning materials;

(d) Conveying VOC-containing cleaning materials from one location to another in closed containers or pipes; and

(e) Minimizing VOC emissions from cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.

(3) All persons shall perform solvent cleaning operations with cleaning material having VOC content of 0.21 pounds per gallon or less.

(4) For each calendar year, all sources subject to R307-343 shall maintain records demonstrating compliance with [~~all provisions of~~]R307-343-4, R307-343-5 and R307-343-7.

(a) Records shall include, but shall not be limited to, inventory and product data sheets for all coatings and solvents subject to R307-343.

(b) These records shall be made available to the director upon request.

[~~R307-343-8. Compliance Schedule.~~

~~(1) Sources in Salt Lake and Davis counties that have the potential to emit between 2.7 and 24 tons of VOC per year shall be in compliance by September 1, 2013.~~

~~(2) Sources in Salt Lake and Davis counties that have the potential to emit 25 tons or more of VOC per year shall be in compliance upon the effective date of this rule.~~

~~(3) All sources in Box Elder, Cache, Tooele, Utah and Weber counties shall be in compliance with this rule by January 1, 2014.~~]

KEY: air pollution, wood furniture, coatings
Date of Enactment or Last Substantive Amendment: [~~May 1, 2013~~]2014
Notice of Continuation: February 1, 2012

Authorizing, and Implemented or Interpreted Law: 19-2-104(1)(a); 19-2-104(3)(e)

R307. Environmental Quality, Air Quality.
R307-344. Paper, Film, and Foil Coatings.
R307-344-1. Purpose.

The purpose of this rule is to limit volatile organic compound (VOC) emissions from roll, knife, and rotogravure coaters and drying ovens of paper, film, and foil coating operations.

R307-344-2. Applicability.

[~~(1)~~]R307-344 applies to sources located in Box Elder, Cache, Davis, Salt Lake, Tooele, Utah and Weber counties that have the potential to emit 2.7 tons per year or more of VOC, including related cleaning activities.

[~~(2) In Box Elder and Tooele counties, R307-344 applies to the following sources:~~

~~(a) Existing sources as of February 1, 2013, with the potential to emit 5 tons per year or more of VOC, including related cleaning activities; and~~

~~(b) New sources as of February 1, 2013, that have the potential to emit 2.7 tons per year or more of VOC, including related cleaning activities.~~]

R307-344-3. Definitions.

The following additional definitions apply to R307-344:

"Coating" means a protective, functional, or decorative film applied in a thin layer to a surface. This term often applies to paints such as lacquers or enamels. It is also used to refer to films applied to paper, plastics, or foil.

"Foil coating" means a coating applied in a web coating process on any foil substrate other than paper or fabric, including, but not limited to, typewriter ribbons, photographic film, magnetic tape, and metal foil gift wrap, but excluding coatings applied to packaging used exclusively for food and health care products for human and animal consumption.

"Knife coating" means the application of a coating material to a substrate by means of drawing the substrate beneath a blade that spreads the coating evenly over the width of the substrate.

"Paper coating" means uniform distribution of coatings put on paper, film, foils and pressure sensitive tapes regardless of substrate. Related web coating processes on plastic film and decorative coatings on metal foil are included in this definition. Paper coating covers saturation operations as well as coating operations.

"Roll coating" means the application of a coating material to a substrate by means of hard rubber or steel rolls.

"Roll printing" means the application of words, designs and pictures to a substrate usually by means of a series of hard rubber or steel rolls each with only partial coverage.

"Rotogravure coating" means the application of a uniform layer of material across the entire width of the web to substrate by means of a roll coating technique in which the pattern to be applied is etched on the coating roll. The coating material is picked up in these recessed areas and is transferred to the substrate.

"Saturation" means dipping the web into a bath.
"Web" means a continuous sheet of substrate.

R307-344-4. [~~Emission Standards~~]VOC Content Limits.

Each owner or operator shall not apply coatings with a VOC content in excess of the amounts specified in Table 1 or shall use an add-on control device as specified in R307-344-6.

TABLE 1

Paper, Film, and Foil Coating Limitations
(values in pounds VOC per pound of coating, minus water and exempt solvents (compounds not classified as VOC), as applied)

COATING CATEGORY	VOC EMISSION RATES
Paper, film and foil	0.08
Pressure sensitive tape and label	0.067

R307-344-5. Work Practices and Recordkeeping.

(1) Control techniques and work practices are to be implemented at all times to reduce VOC emissions [~~from fugitive type sources~~]. Control techniques and work practices include:
(a) Using tight fitting covers for open tanks;
(b) Using covered containers for solvent wiping cloths;
(c) Using collection hoods for areas where solvent is used for cleanup;
(d) Minimizing spills of VOC-containing cleaning materials;
(e) Conveying VOC-containing materials from one location to another in closed containers or pipes;
(f) Cleaning spray guns in enclosed systems; and
(g) Using recycled solvents for cleaning.

(2) All sources subject to R307-344 shall maintain records demonstrating compliance with [~~all provisions of~~]R307-344-4 and R307-344-5[~~on an annual basis~~].
(a) Records shall include, but not limited to, inventory and product data sheets of all coatings and solvents subject to R307-344.
(b) These records shall be available to the director upon request.

(3) No person shall apply coatings unless these materials are applied with equipment operated according to the manufacturer's specifications, and by the use of one of the following methods:
(a) Flow coater;
(b) Roll coater;
(c) Dip coater;
(d) Foam coater;
(e) Die coater;
(f) Hand application methods;
(g) High-volume, low pressure (HVLP) spray; or
(h) Other application method capable of achieving at least 65%

transfer efficiency, as certified by the manufacturer.

(4) All persons shall perform solvent cleaning operations with cleaning materials having VOC content of 0.21 pounds per gallon or less.

R307-344-6. [~~Optional~~]Add-On Controls Systems Operations.

[~~(1) The owner or operator may install and maintain an incinerator, carbon adsorption, or any other add-on emission control device, provided that the emission control device will attain at least 90% efficiency performance.~~

~~(2) The owner or operator of a control device shall provide documentation that the emission control system will attain the requirements of R307-344-6.~~

~~(3) Emission control systems shall be operated and maintained in accordance with the manufacturer recommendations. The owner or operator shall maintain for a minimum of two years records of operating and maintenance sufficient to demonstrate that the equipment is being operated and maintained in accordance with the manufacturer recommendations.~~]

(1) The owner or operator shall install and maintain an incinerator, carbon adsorption, or any other add-on emission control system, provided that the emission control system is operated and maintained in accordance with the manufacturer recommendations in order to maintain at least 90% capture and control efficiency. Determination of overall capture and control efficiency shall be determined using EPA approved methods, as follows.

(a) The capture efficiency of a VOC emission control system's VOC collection device shall be determined according to EPA's "Guidelines for Determining Capture Efficiency," January 9, 1995 and 40 CFR Part 51, Appendix M, Methods 204-204F, as applicable.

(b) The control efficiency of a VOC emission control system's VOC control device shall be determined using test methods in Appendices A-1, A-6, and A-7 to 40 CFR Part 60, for measuring flow rates, total gaseous organic concentrations, or emissions of exempt compounds, as applicable.

(c) An alternative test method may be substituted for the preceding test methods after review and approval by the EPA Administrator.

(2) The owner or operator of a control system shall provide documentation that the emission control system will attain the requirements of R307-344-6(1).

(3) The owner or operator shall maintain records of key system parameters necessary to ensure compliance with R307-344-6. Key system parameters may include, but are not limited to, temperature, pressure and flow rates. Operator inspection schedule, monitoring, recordkeeping, and key parameters shall be in accordance with the manufacturer's recommendations, and as required to demonstrate operations are providing continuous emission reduction from the source during all periods that the operations cause emissions from the source.

(4) The owner or operator shall maintain for a minimum of two years records of operating and maintenance sufficient to demonstrate that the equipment is being operated and maintained in accordance

with the manufacturer recommendations.

[~~**R307-344-7. Compliance Schedule.**~~

~~(1) All sources in Davis and Salt Lake counties are subject to this rule upon the effective date.~~

~~(2) Sources in Box Elder, Cache, Tooele, Utah and Weber counties shall be in compliance with the rule by January 1, 2014.~~]

KEY: VOC emission, paper coating, film coating, foil coating
Date of Enactment or Last Substantive Amendment: [~~February 1, 2013~~]2014
Authorizing, and Implemented or Interpreted Law: 19-2-104(1)(a)

R307. Environmental Quality, Air Quality.
R307-345. Fabric and Vinyl Coatings.
R307-345-1. Purpose.

The purpose of this rule is to limit volatile organic compound (VOC) emissions from fabric and vinyl coating operations, which use roll, knife, or rotogravure coaters and drying ovens.

R307-345-2. Applicability.

[~~(1)~~]R307-345 applies to sources located in Box Elder, Cache, Davis, Salt Lake, Tooele, Utah and Weber counties that have the potential to emit 2.7 tons per year or more of VOC, including related cleaning activities.

[~~(2) In Box Elder and Tooele counties, R307-345 applies to the following sources:~~

~~(a) Existing sources as of February 1, 2013 with the potential to emit 5 tons per year or more of VOC, including related cleaning activities; and~~

~~(b) New sources as of February 1, 2013 that have the potential to emit 2.7 tons per year or more of VOC, including related cleaning activities.~~]

R307-345-3. Definitions.

The following additional definitions apply to R307-345:

"Coating" means a protective, functional, or decorative film applied in a thin layer to a surface.

"Fabric coating" means the coating or saturation of a textile substrate with a knife, roll or rotogravure coater to impart characteristics that are not initially present, such as strength, stability, water or acid repellency, or appearance. Fabric coatings can include, but are not limited to, industrial and electrical tapes, tie cord, utility meter seals, imitation leathers, tarpaulins, shoe material, and upholstery fabrics.

"Knife coating" means the application of a coating material to a substrate by means of drawing the substrate beneath a blade that spreads the coating evenly over the width of the substrate.

"Roller coating" the coating material is applied to the moving fabric, in a direction opposite to the movement of the substrate, by hard rubber or steel rolls.

"Rotogravure coating" means the application of a uniform layer of material across the entire width of the web to substrate by means of a roll coating technique in which the pattern to be applied is etched on the coating roll. The coating material is picked up in these recessed areas and is transferred to the substrate.

"Vinyl coating" means applying a decorative or protective top coat, or printing on vinyl coated fabric or vinyl sheets.

R307-345-4. [~~Emission Standards~~]VOC Content Limits.

(1) Each owner or operator shall not apply coatings with a VOC content in excess of the amounts specified in Table 1 or shall use an add-on control device as specified in R307-345-6.

TABLE 1

Fabric and Vinyl Coating Limitations
(values in pounds VOC per gallon of coating, minus water and exempt solvents (compounds not classified as VOC), as applied)

COATING CATEGTORY	VOC[~~EMISSION RATES~~] CONTENT LIMITS Effective Through December 31, 2014	VOC [~~EMISSION RATES~~] CONTENT LIMITS Effective Beginning January 1, 2015
Fabric	2.9	2.2
Vinyl	3.8	2.2

(2) Organosol and plastisol coatings shall not be used to bubble emissions from vinyl printing and top coating.

R307-345-5. Work Practices and Recordkeeping.

(1) Control techniques and work practices are to be implemented at all times to reduce VOC emissions[~~from fugitive type sources~~]. Control techniques and work practices include:

(a) Tight fitting covers for open tanks or drums;

(b) Covered containers for solvent wiping cloths;

(c) Collection hoods for areas where solvent is used for cleanup;

(d) Covered mixing tanks; and

(e) Covered hoods and oven routed to add-on control devices, which may include, but are not limited to, after burners, thermal incinerators, catalytic oxidation, or carbon adsorption.

(2) No person shall apply any coating unless the coating application method achieves a demonstrated 65% transfer efficiency.

The following applications achieve a minimum of 65% transfer efficiency and must be operated in accordance with the manufacturers specifications:

(a) Foam coat;

(b) Flow coat;

(c) Roll coat;

(d) Dip coat;

(e) Die coat;

(e) High-volume, low-pressure (HVLP) spray;

(f) Hand application methods; or

(g) Other application method capable of achieving at least 65% transfer efficiency, as certified by the manufacturer.

(3) All persons shall perform solvent cleaning operations with cleaning material having VOC content of 0.21 pounds per gallon or less.

(4) All sources subject to R307-345 shall maintain records demonstrating compliance with[~~all provisions of~~] R307-345-4 and R307-345-5[~~on an annual basis~~].

(a) Records shall include, but not be limited to, inventory and product data sheets of all coatings and solvents subject to R307-345.

(b) These records shall be available to the director upon

request.

R307-345-6. ~~Optional~~ Add-On Controls Systems Operations.

[~~(1) The owner or operator may install and maintain an incinerator, carbon adsorption, or any other add-on emission control device, provided that the emission control device will attain at least 90% efficiency performance.~~

~~(2) The owner or operator of a control device shall provide documentation that the emission control system will attain the requirements of R307-345-6.~~

~~(3) Emission control systems shall be operated and maintained in accordance with the manufacturer recommendations. The owner or operator shall maintain for a minimum of two years records of operating and maintenance sufficient to demonstrate that the equipment is being operated and maintained in accordance with the manufacturer recommendations.~~]

(1) The owner or operator shall install and maintain an incinerator, carbon adsorption, or any other add-on emission control system, provided that the emission control system is operated and maintained in accordance with the manufacturer recommendations in order to maintain at least 90% capture and control efficiency. Determination of overall capture and control efficiency shall be determined using EPA approved methods, as follows.

(a) The capture efficiency of a VOC emission control system's VOC collection device shall be determined according to EPA's "Guidelines for Determining Capture Efficiency," January 9, 1995 and 40 CFR Part 51, Appendix M, Methods 204-204F, as applicable.

(b) The control efficiency of a VOC emission control system's VOC control device shall be determined using test methods in Appendices A-1, A-6, and A-7 to 40 CFR Part 60, for measuring flow rates, total gaseous organic concentrations, or emissions of exempt compounds, as applicable.

(c) An alternative test method may be substituted for the preceding test methods after review and approval by the EPA Administrator.

(2) The owner or operator of a control system shall provide documentation that the emission control system will attain the requirements of R307-345-6(1).

(3) The owner or operator shall maintain records of key system parameters necessary to ensure compliance with R307-345-6. Key system parameters may include, but are not limited to, temperature, pressure and flow rates. Operator inspection schedule, monitoring, recordkeeping, and key parameters shall be in accordance with the manufacturer's recommendations, and as required to demonstrate operations are providing continuous emission reduction from the source during all periods that the operations cause emissions from the source.

(4) The owner or operator shall maintain for a minimum of two years records of operating and maintenance sufficient to demonstrate that the equipment is being operated and maintained in accordance with the manufacturer recommendations.

[~~R307-345-7. Compliance Schedule.~~

~~(1) All sources in Davis and Salt Lake counties are subject to this rule upon the effective date.~~

~~(2) All sources within Box Elder, Cache, Tooele, Utah and Weber counties shall be in compliance with this rule by January 1, 2014.~~]

KEY: air pollution, emission controls, fabric coating, vinyl coating
Date of Enactment or Last Substantive Amendment: [~~February 1, 2013~~]2014
Authorizing, and Implemented or Interpreted Law: 19-2-104(1)(a)

R307. Environmental Quality, Air Quality.
R307-346. Metal Furniture Surface Coatings.
R307-346-1. Purpose.

The purpose of this rule is to limit volatile organic compound (VOC) emissions from metal furniture surface coating operations in application areas, flash-off areas, and ovens of metal furniture coating lines involved in prime and top-coat or single coat operations.

R307-346-2. Applicability.

[~~(1)~~]R307-346 applies to sources located in Box Elder, Cache, Davis, Salt Lake, Tooele, Utah and Weber counties that have the potential to emit 2.7 tons per year or more of VOC, including related cleaning activities.

[~~(2) In Box Elder and Tooele counties, R307-346 applies to the following sources:~~

~~(a) Existing sources as of February 1, 2013 with the potential to emit 5 tons per year or more of VOC, including related cleaning activities; and~~

~~(b) New sources as of February 1, 2013 that have the potential to emit 2.7 tons per year or more of VOC, including related cleaning activities.~~]

R307-346-3. Exemptions.

(1) The requirements of R307-346 do not apply to the following:
(a) Stencil coatings;
(b) Safety-indicating coatings;
(c) Solid-film lubricants;
(d) Electrical-insulating and thermal-conducting coatings;
(e) Touch-up and repair coatings; or
(f) Coating applications utilizing hand-held aerosol cans.

R307-346-4. Definitions.

The following additional definitions apply to R307-346:

"Air dried coating" means coatings that are dried by the use of air or a forced warm air at temperatures up to 194 degrees Fahrenheit.

"Application area" means the area where the coating is applied by spraying, dipping, or flow coating techniques.

"Baked coating" means a coating that is cured at a temperature at or above 194 degrees Fahrenheit.

"Coating" means a protective, functional, or decorative film applied in a thin layer to a surface. This term applies to paints, sealants, caulks, inks, adhesives, and maskants.

"Extreme performance coatings" means coatings designed for harsh exposure or extreme environmental conditions.

"Maskants" means a material that protects a metal surface during the etching process.

"Metal furniture coating" means the surface coating of any furniture made of metal or any metal part that will be assembled with other metal, wood fabric, plastic, or glass parts to form a furniture piece.

R307-346-5. [~~Emission Standards~~]VOC Content Limits.

Each owner or operator shall not apply coatings with a VOC content in excess of the amounts specified in Table 1 or shall use an add-on control device as specified in R307-346-7.

TABLE 1

METAL FURNITURE SURFACE COATING VOC LIMITS
(values in pounds of VOC per gallon of coating, minus water and exempt solvents (compounds not classified as VOC, as applied)

COATING CATEGORY	VOC [~~EMISSION RATE~~]CONTENT LIMITS	
	Baked	Air Dried
General, One Component	2.3	2.3
General, Multi-Component	2.3	2.8
Extreme High Gloss	3.0	2.8
Extreme Performance	3.0	3.5
Heat Resistant	3.0	3.5
Metallic	3.5	3.5
Pretreatment Coatings	3.5	3.5
Solar Absorbent	3.0	3.5

R307-346-6. Work Practices.

(1) The owner or operator shall:

(a) Store all VOC-containing coatings, thinners, and cleaning materials in closed containers;

(b) Minimize spills of VOC-containing coatings, thinners, and cleaning materials;

(c) Clean up spills immediately;

(d) Convey any coatings, thinners, and cleaning materials in closed containers or pipes;

(e) Close mixing vessels that contain VOC coatings and other materials except when specifically in use; and

(f) Minimize usage of solvents during cleaning of storage, mixing, and conveying equipment.

(2) No person shall apply any coating unless the coating application method achieves a demonstrated 65% transfer efficiency.

The following applications achieve a minimum of 65% transfer efficiency and shall be operated in accordance with the manufacturers specifications:

(a) Electrostatic application;

(b) Electrodeposition;

(c) Brush coat;

(d) Flow coat;
(e) Roll coat;
(f) Dip coat;
(g) Continuous coating;
(h) High-volume, low-pressure (HVLP) spray; or
(i) Other application method capable of achieving at least 65% transfer efficiency, as certified by the manufacturer.

(3) All persons shall perform solvent cleaning operations with cleaning material having VOC content of 0.21 pounds per gallon or less, unless such cleaning operations are performed within the control of the emission control system of R307-346-7.

(4) All sources subject to R307-346 shall maintain records demonstrating compliance with[~~all provisions of~~] R307-346-5 and R307-346-6[~~on an annual basis~~].

(a) Records shall include, but not be limited to, inventory and product data sheets of all coatings and solvents subject to R307-346.

(b) These records shall be available to the director upon request.

R307-346-7. [~~Optional~~]Add-On Controls Systems Operations.

[~~(1) The owner or operator may install and maintain an incinerator, carbon adsorption, or any other add-on emission control device, provided that the emission control device will attain at least 90% efficiency performance.~~

~~(2) The owner or operator of a control device shall provide documentation that the emission control system will attain the requirements of R307-346-7.~~

~~(3) Emission control systems shall be operated and maintained in accordance with the manufacturer recommendations. The owner or operator shall maintain for a minimum of two years records of operating and maintenance sufficient to demonstrate that the equipment is being operated and maintained in accordance with the manufacturer recommendations.~~]

(1) The owner or operator shall install and maintain an incinerator, carbon adsorption, or any other add-on emission control system, provided that the emission control system is operated and maintained in accordance with the manufacturer recommendations in order to maintain at least 90% capture and control efficiency. Determination of overall capture and control efficiency shall be determined using EPA approved methods, as follows.

(a) The capture efficiency of a VOC emission control system's VOC collection device shall be determined according to EPA's "Guidelines for Determining Capture Efficiency," January 9, 1995 and 40 CFR Part 51, Appendix M, Methods 204-204F, as applicable.

(b) The control efficiency of a VOC emission control system's VOC control device shall be determined using test methods in Appendices A-1, A-6, and A-7 to 40 CFR Part 60, for measuring flow rates, total gaseous organic concentrations, or emissions of exempt compounds, as applicable.

(c) An alternative test method may be substituted for the preceding test methods after review and approval by the EPA

Administrator.

(2) The owner or operator of a control system shall provide documentation that the emission control system will attain the requirements of R307-346-7(1).

(3) The owner or operator shall maintain records of key system parameters necessary to ensure compliance with R307-346-7. Key system parameters may include, but are not limited to, temperature, pressure and flow rates. Operator inspection schedule, monitoring, recordkeeping, and key parameters shall be in accordance with the manufacturer's recommendations, and as required to demonstrate operations are providing continuous emission reduction from the source during all periods that the operations cause emissions from the source.

(4) The owner or operator shall maintain for a minimum of two years records of operating and maintenance sufficient to demonstrate that the equipment is being operated and maintained in accordance with the manufacturer recommendations.

[~~R307-346-8. Compliance Schedule.~~

~~(1) All sources in Davis and Salt Lake counties are subject to this rule as of the effective date.~~

~~(2) Sources in Box Elder, Cache, Utah, Tooele, and Weber counties shall be in compliance with the rule by January 1, 2014.~~]

KEY: air pollution, emission controls, surface coating, metal furniture

Date of Enactment or Last Substantive Amendment: [~~February 1, 2013~~]2014

Authorizing, and Implemented or Interpreted Law: 19-2-104(1)(a)

R307. Environmental Quality, Air Quality.
R307-347. Large Appliance Surface Coatings.
R307-347-1. Purpose.

The purpose of this rule is to reduce volatile organic compound (VOC) emissions from large appliance surface coating operations.

R307-347-2. Applicability.

[~~(1)~~]R307-347 applies to sources located in Box Elder, Cache, Davis, Salt Lake, Tooele, Utah and Weber counties that have the potential to emit 2.7 tons per year or more of VOC, including related cleaning activities.

[~~(2) In Box Elder and Tooele counties, R307-347 applies to the following sources:~~

~~(a) Existing sources as of February 1, 2013, that have the potential to emit 5 tons per year or more of VOC, including related cleaning activities; and~~

~~(b) New sources as of February 1, 2013, that have the potential to emit 2.7 tons per year or more of VOC, including related cleaning activities.~~]

R307-347-3. Exemptions.

(1) The requirements of R307-347 do not apply to the following:
(a) Stencil coatings;
(b) Safety-indicating coatings;
(c) Solid-film lubricants;
(d) Electric-insulating and thermal-conducting coatings;
(e) Touch-up and repair coatings; or
(f) Coating application utilizing hand-held aerosol cans.

R307-347-4. Definitions.

The following additional definitions apply to R307-347:

"Air dried coating" means coatings that are dried by the use of air or a forced warm air at temperatures up to 194 degrees Fahrenheit.

"Baked coating" means a coating that is cured at a temperature at or above 198 degrees Fahrenheit.

"Coating" means a protective, functional, or decorative film applied in a thin layer to a surface. This term often applies to paints such as lacquers or enamels. It is also used to refer to films applied to paper, plastics, or foil.

"Extreme performance coatings" means coatings designed for harsh exposure or extreme environmental conditions.

"Large appliances" means doors, cases, lids, panels, and interior support parts of residential and commercial washers, dryers, ranges, refrigerators, freezers, water heaters, dishwashers, trash compactors, air conditioners, and other similar products.

R307-347-5. [~~Emission Standards~~]VOC Content Limits.

Each owner or operator shall not apply coatings with a VOC content in excess of the amounts specified in Table 1 or shall use an add-on control device as specified in R307-347-7.

TABLE 1

Large Appliance Coating Limitations
(values in pounds VOC per gallon of coating, minus water and exempt solvents(compounds not classified as VOC), as applied)

COATING CATEGORY	VOC [~~EMISSION RATES~~]CONTENT LIMITS	
	Baked	Air Dried
General, one component	2.3	2.3
General, multi-component	2.3	2.8
Extreme high gloss	3.0	2.8
Extreme performance	3.0	3.5
Heat resistance	3.0	3.5
Solar absorbent	3.0	3.5
Metallic	3.5	3.5
Pretreatment coatings	3.5	3.5

R307-347-6. Work Practices and Recordkeeping.

(1) The owner or operator shall:

(a) Store all VOC-containing coatings, thinners, and cleaning materials in closed containers;

(b) Minimize spills of VOC-containing coatings, thinners, and cleaning materials;

(c) Clean up spills immediately;

(d) Convey any coatings, thinners, and cleaning materials in closed containers or pipes;

(e) Close mixing vessels that contain VOC coatings and other materials except when specifically in use; and

(f) Minimize usage of solvents during cleaning of storage, mixing, and conveying equipment.

(2) All sources subject to R307-347 shall maintain records demonstrating compliance with[~~ all provisions of~~] R307-347-5 and R307-347-6[~~ on an annual basis~~].

(a) Records shall include, but not be limited to, inventory and product data sheets of all coatings and solvents subject to R307-3[~~52~~]47.

(b) These records shall be made available to the director upon request.

(3) No person shall apply any coating unless the coating application method achieves a demonstrated 65% transfer efficiency. The following applications achieve a minimum of 65% transfer

efficiency and shall be operated in accordance with the manufacturers specifications:

(a) Electrostatic application;

(b) Electrodeposition;

(c) Brush coat;

(d) Flow coat;

(e) Roll coat;

(f) Dip coat;

(g) High-volume, low-pressure (HVLP) spray; or

(h) Other application method capable of achieving at least 65% transfer efficiency, as certified by the manufacturer.

(4) All persons shall perform solvent cleaning operations with cleaning materials having VOC content of 0.21 pounds per gallon or less.

R307-347-7. [~~Optional~~]Add-On Controls Systems Operations.

[~~(1) The owner or operator may install and maintain an incinerator, carbon adsorption, or any other add-on emission control device, provided that the emission control device will attain at least 90% efficiency performance.~~

~~(2) The owner or operator of a control device shall provide documentation that the emission control system will attain the requirements of R307-347-7.~~

~~(3) Emission control systems shall be operated and maintained in accordance with the manufacturer recommendations. The owner or operator shall maintain for a minimum of two years records of operating and maintenance sufficient to demonstrate that the equipment is being operated and maintained in accordance with the manufacturer recommendations.~~]

(1) The owner or operator shall install and maintain an incinerator, carbon adsorption, or any other add-on emission control system, provided that the emission control system is operated and maintained in accordance with the manufacturer recommendations in order to maintain at least 90% capture and control efficiency. Determination of overall capture and control efficiency shall be determined using EPA approved methods, as follows.

(a) The capture efficiency of a VOC emission control system's VOC collection device shall be determined according to EPA's "Guidelines for Determining Capture Efficiency," January 9, 1995 and 40 CFR Part 51, Appendix M, Methods 204-204F, as applicable.

(b) The control efficiency of a VOC emission control system's VOC control device shall be determined using test methods in Appendices A-1, A-6, and A-7 to 40 CFR Part 60, for measuring flow rates, total gaseous organic concentrations, or emissions of exempt compounds, as applicable.

(c) An alternative test method may be substituted for the preceding test methods after review and approval by the EPA Administrator.

(2) The owner or operator of a control system shall provide documentation that the emission control system will attain the requirements of R307-347-7(1).

(3) The owner or operator shall maintain records of key system parameters necessary to ensure compliance with R307-347-7. Key system parameters may include, but are not limited to, temperature, pressure and flow rates. Operator inspection schedule, monitoring, recordkeeping, and key parameters shall be in accordance with the manufacturer's recommendations, and as required to demonstrate operations are providing continuous emission reduction from the source during all periods that the operations cause emissions from the source.

(4) The owner or operator shall maintain for a minimum of two years records of operating and maintenance sufficient to demonstrate that the equipment is being operated and maintained in accordance with the manufacturer recommendations.

[~~R307-347-8. Compliance Schedule.~~

~~(1) All sources in Davis and Salt Lake counties are subject to this rule as of the effective date of this rule.~~

~~(2) Sources in Box Elder, Cache, Tooele, Utah and Weber counties shall be in compliance with this rule by January 1, 2014.~~]

KEY: air pollution, emission controls, large appliance, surface coating

Date of Enactment or Last Substantive Amendment: [~~February 1, 2013~~]2014

Authorizing, and Implemented or Interpreted Law: 19-2-104(1)(a)

R307. Environmental Quality, Air Quality.
R307-348. Magnet Wire Coatings.
R307-348-1. Purpose.

The purpose of this rule is to limit volatile organic compound (VOC) emissions from ovens of magnet wire coating operations.

R307-348-2. Applicability.

[~~(1)~~]R307-348 applies to sources located in Box Elder, Cache, Davis, Salt Lake, Tooele, Utah and Weber counties that have the potential to emit 2.7 tons per year or more of VOC, including related cleaning activities.

[~~(2) In Box Elder and Tooele counties, R307-348 applies to the following sources:~~

~~(a) Existing sources as of February 1, 2013, with the potential to emit 5 tons per year or more of VOC, including related cleaning activities; and~~

~~(b) New sources as of February 1, 2013, that have the potential to emit 2.7 tons per year or more of VOC, including related cleaning activities.~~]

R307-348-3. Definitions.

The following additional definition applies to R307-348:

"Magnet wire coating" means the process of applying coating of electrical insulating varnish or enamel to aluminum or copper wire for use in electrical machinery.

R307-348-4. [~~Emission Standards~~]VOC Content Limit.

(1) No owner or operator of a magnet wire coating oven may cause, allow or permit discharge into the atmosphere of any VOC in excess of 0.20 kilograms per liter of coating (1.7 pounds per gallon), excluding water, and exempt solvents (compounds not classified as VOCs) delivered to the coating applicator from magnet wire coating operations.

(a) Equivalency calculations for coatings shall be performed in units of pounds VOCs per gallon of solid rather than pounds VOCs per gallon of coating when determining compliance.

(b) The equivalent emission limit is 2.2 pounds VOCs per gallon solids.

(2) The emission limitations specified above shall be achieved by:

(a) The application of low solvent content coating technology; or

(b) The use of an add-on control device on magnet wire coating ovens as specified in R307-348-6.

R307-348-5. Work Practices and Recordkeeping.

(1) The owner or operator shall:

(a) Store all VOC-containing coatings and cleaning materials in closed containers;

(b) Minimize spills of VOC-containing coatings and cleaning materials;

(c) Clean up spills immediately;
(d) Convey any coatings, thinners, and cleaning materials in closed containers or pipes;
(e) Close mixing vessels that contain VOC coatings and other materials except when specifically in use; and
(f) Minimize usage of solvents during cleaning of storage, mixing, and conveying equipment.
(2) All sources subject to R307-348 shall maintain records demonstrating compliance with[~~all provisions of~~] R307-348-4, and these records shall be available to the director upon request.

R307-348-6. [~~Optional~~]Add-On Controls Systems Operations.

[~~(1) The owner or operator may install and maintain an incinerator provided that the emission control device will attain at least 90% efficiency performance.~~
~~(2) The owner or operator of a control device shall provide documentation that the emission control system will attain the requirements of R307-348-6.~~
~~(3) Emission control systems shall be operated and maintained in accordance with the manufacturer recommendations. The owner or operator shall maintain for a minimum of two years records of operating and maintenance sufficient to demonstrate that the equipment is being operated and maintained in accordance with the manufacturer recommendations.~~]

(1) The owner or operator shall install and maintain an incinerator, carbon adsorption, or any other add-on emission control system, provided that the emission control system is operated and maintained in accordance with the manufacturer recommendations in order to maintain at least 90% capture and control efficiency. Determination of overall capture and control efficiency shall be determined using EPA approved methods, as follows.
(a) The capture efficiency of a VOC emission control system's VOC collection device shall be determined according to EPA's "Guidelines for Determining Capture Efficiency," January 9, 1995 and 40 CFR Part 51, Appendix M, Methods 204-204F, as applicable.
(b) The control efficiency of a VOC emission control system's VOC control device shall be determined using test methods in Appendices A-1, A-6, and A-7 to 40 CFR Part 60, for measuring flow rates, total gaseous organic concentrations, or emissions of exempt compounds, as applicable.
(c) An alternative test method may be substituted for the preceding test methods after review and approval by the EPA Administrator.
(2) The owner or operator of a control system shall provide documentation that the emission control system will attain the requirements of R307-348-6(1).
(3) The owner or operator shall maintain records of key system parameters necessary to ensure compliance with R307-348-6. Key system parameters may include, but are not limited to, temperature, pressure and flow rates. Operator inspection schedule, monitoring, recordkeeping, and key parameters shall be in accordance with the

manufacturer’s recommendations, and as required to demonstrate operations are providing continuous emission reduction from the source during all periods that the operations cause emissions from the source.

(4) The owner or operator shall maintain for a minimum of two years records of operating and maintenance sufficient to demonstrate that the equipment is being operated and maintained in accordance with the manufacturer recommendations.

[~~R307-348-7. Compliance Schedule.~~

~~(1) All sources in Davis and Salt Lake counties are subject to this rule as of the effective date of this rule.~~

~~(2) Sources in Box Elder, Cache, Utah, Tooele, and Weber counties shall be in compliance with this rule by January 1, 2014.~~]

KEY: air pollution, emission controls, surface coating, magnet wire
Date of Enactment or Last Substantive Amendment: [~~February 1, 2013~~]2014
Authorizing, and Implemented or Interpreted Law: 19-2-104(1)(a)

R307. Environmental Quality, Air Quality.
R307-349. Flat Wood Panel Coatings.
R307-349-1. Purpose.

The purpose of R307-349 is to limit volatile organic compound (VOC) emissions from flat wood paneling coating sources.

R307-349-2. Applicability.

[~~(1)~~]R307-349 applies to sources located in Box Elder, Cache, Davis, Salt Lake, Tooele, Utah and Weber counties that have the potential to emit 2.7 tons per year or more of VOC, including related cleaning activities.

[~~(2) In Box Elder and Tooele counties, R307-349 apples to the following sources:~~

~~(a) Existing sources as of February 1, 2013 with the potential to emit 5 tons per year or more of VOC, including related cleaning activities; and~~

~~(b) New sources as of February 1, 2013 that have the potential to emit 2.7 tons per year or more of VOC, including related cleaning activities.~~]

R307-349-3. Definitions.

The following additional definitions apply to R307-349:

"Coating" means a protective, decorative, or functional material applied in a thin layer to a surface. Such materials may include paints, topcoats, varnishes, sealers, stains, washcoats, basecoats, inks, and temporary protective coatings.

"Finishing material" means a coating used in the flat wood panel industry, including basecoats, stains, washcoats, sealers, and topcoats.

"Flat wood paneling" means wood paneling products that are any decorative interior, exterior or tileboard (class I hardboard) panel to which a protective, decorative, or functional material or layer has been applied.

"Sealer" means a finishing material used to seal the pores of a wood substrate before additional coats of finishing material are applied. A washcoat used to optimize aesthetics is not a sealer.

"Strippable booth coating" means a coating that is applied to a booth wall to provide a protective film to receive overspray during finishing and that is subsequently peeled and disposed. Strippable booth coatings are intended to reduce or eliminate the need to use organic solvents to clean booth walls.

"Tileboard" means a premium interior wall paneling product made of hardboard that meets the specifications for Class I given by the standard ANSI/AHA A135.4-1995.

R307-349-4. [~~Emission Standards~~]VOC Content Limit.

(1) Each owner or operator shall not apply coatings with a VOC content in excess of 2.1 pounds of VOC per gallon, excluding water and exempt solvents (compounds not classified as VOC). The equivalent emission limit shall be 2.9 pounds VOCs per gallon solids coating; or

(2) Each owner or operator shall use an add-on control device

as specified in R307-349-6.

R307-349-5. Work Practice and Recordkeeping.

(1) The owner or operator shall:

(a) Store all VOC-containing coatings, thinners, and cleaning materials in closed containers;

(b) Minimize spills of VOC-containing coatings, thinners, and cleaning materials;

(c) Clean up spills immediately;

(d) Convey any coatings, thinners, and cleaning materials in closed containers or pipes;

(e) Close mixing vessels that contain VOC coatings and other materials except when specifically in use; and

(f) Minimize usage of solvents during cleaning of storage, mixing, and conveying of equipment.

(2) No person shall apply any coating unless the coating application method achieves a demonstrated 65% transfer efficiency.

The following applications achieve a minimum of 65% transfer efficiency and shall be operated in accordance with the manufacturers specifications:

(a) Paint brush;

(b) Flow coat;

(c) Roll coat;

(d) Dip coat;

(e) Detailing or touch-up guns;

(e) High-volume, low-pressure (HVLP) spray;

(f) Hand application methods; or

(g) Other application method capable of achieving at least 65% transfer efficiency, as certified by the manufacturer.

(3) No person shall use organic solvents for cleaning operations that exceed a VOC content of 0.21 pounds per gallon and a strippable booth coating with a VOC content in excess of 3.8 pounds per gallon, excluding water and exempt solvents (compounds that are not defined as VOC).

(4) All sources subject to R307-349 shall maintain records demonstrating compliance with[~~ all provisions of~~] R307-349-4 and R307-349-5[~~ on an annual basis~~].

(a) Records should include, but not be limited to, inventory and products data sheets of all coatings and solvents subject to R307-349.

(b) These records shall be available to the Director upon request.

R307-349-6. [~~Optional~~]Add-On Controls Systems Operations.

[~~(1) The owner or operator may install and maintain an incinerator, carbon adsorption, or any other add-on emission control device, provided that the emission control device will attain at least 90% efficiency performance.~~

~~(2) The owner or operator of a control device shall provide documentation that the emission control system will attain the requirements of R307-349-6.~~

~~(3) Emission control systems shall be operated and maintained~~

~~in accordance with the manufacturer recommendations. The owner or operator shall maintain for a minimum of two years records of operating and maintenance sufficient to demonstrate that the equipment is being operated and maintained in accordance with the manufacturer recommendations.~~]

(1) The owner or operator shall install and maintain an incinerator, carbon adsorption, or any other add-on emission control system, provided that the emission control system is operated and maintained in accordance with the manufacturer recommendations in order to maintain at least 90% capture and control efficiency. Determination of overall capture and control efficiency shall be determined using EPA approved methods, as follows.

(a) The capture efficiency of a VOC emission control system's VOC collection device shall be determined according to EPA's "Guidelines for Determining Capture Efficiency," January 9, 1995 and 40 CFR Part 51, Appendix M, Methods 204-204F, as applicable.

(b) The control efficiency of a VOC emission control system's VOC control device shall be determined using test methods in Appendices A-1, A-6, and A-7 to 40 CFR Part 60, for measuring flow rates, total gaseous organic concentrations, or emissions of exempt compounds, as applicable.

(c) An alternative test method may be substituted for the preceding test methods after review and approval by the EPA Administrator.

(2) The owner or operator of a control system shall provide documentation that the emission control system will attain the requirements of R307-349-6(1).

(3) The owner or operator shall maintain records of key system parameters necessary to ensure compliance with R307-349-6. Key system parameters may include, but are not limited to, temperature, pressure and flow rates. Operator inspection schedule, monitoring, recordkeeping, and key parameters shall be in accordance with the manufacturer's recommendations, and as required to demonstrate operations are providing continuous emission reduction from the source during all periods that the operations cause emissions from the source.

(4) The owner or operator shall maintain for a minimum of two years records of operating and maintenance sufficient to demonstrate that the equipment is being operated and maintained in accordance with the manufacturer recommendations.

[~~R307-349-7. Compliance Schedule.~~

~~(1) All sources in Davis and Salt Lake counties are subject to this rule as of the effective date of this rule.~~

~~(2) Sources in Box Elder, Cache, Tooele, Utah and Weber counties shall be in compliance with this rule by January 1, 2014.~~]

KEY: air pollution, emission controls, flat wood paneling, coatings
Date of Enactment or Last Substantive Amendment: [~~February 1, 2013~~]2014
Authorizing, and Implemented or Interpreted Law: 19-2-104(1)(a)

R307. Environmental Quality, Air Quality.
R307-350. Miscellaneous Metal Parts and Products Coatings.
R307-350-1. Purpose.

The purpose of R307-350 is to limit volatile organic compound (VOC) emissions from miscellaneous metal parts and products coating operations.

R307-350-2. Applicability.

(1) R307-350 applies to sources located in Box Elder, Cache, Davis, Salt Lake, Tooele, Utah and Weber counties where the potential to emit VOC emissions from all miscellaneous metal product parts surface coating operations, including related cleaning activities, is 2.7 tons per year or more.

[~~(2) In Box Elder and Tooele counties, R307-350 applies to the following sources:~~

~~(a) Existing sources as of February 1, 2013, with the potential to emit 5 tons per year or more of VOC, including related cleaning activities; and~~

~~(b) New sources as of February 1, 2013, that have the potential to emit 2.7 tons per year or more of VOC, including related cleaning activities.~~]

([~~3~~]2) R307-350 applies to, but is not limited to, the following industries:

(a) Large farm machinery (harvesting, fertilizing, planting, tractors, combines, etc.);

(b) Small farm machinery (lawn and garden tractors, lawn mowers, rototillers, etc.)

(c) Small appliance (fans, mixers, blenders, crock pots, vacuum cleaners, etc.);

(d) Commercial machinery (computers, typewriters, calculators, vending machines, etc.);

(e) Industrial machinery (pumps, compressors, conveyor components, fans, blowers, transformers, etc.);

(f) Fabricated metal products (metal covered doors, frames, trailer frames, etc.); and

(g) Any other industrial category that coats metal parts or products under the standard Industrial Classification Code of major group 33 (primary metal industries), major group 34 (fabricated metal products), major group 35 (nonelectric machinery), major group 36 (electrical machinery), major group 37 (transportation equipment) major group 38 (miscellaneous instruments), and major group 39 (miscellaneous manufacturing industries).

R307-350-3. Exemptions.

(1) The requirements of R307-350 do not apply to the following:

(a) The surface coating of automobiles and light-duty trucks;

(b) Flat metal sheets and strips in the form of rolls or coils;

(c) Surface coating of aerospace vehicles and components;

(d) Automobile refinishing;

(e) The exterior of marine vessels;

(f) Customized top coating of automobiles and trucks if

production is less than 35 vehicles per day;

(g) Military munitions manufactured by or for the Armed Forces of the United States;

(h) Operations that are exclusively covered by Department of Defense military technical data and performed by a Department of Defense contractor and/or on site at installations owned and/or operated by the United States Armed Forces; or

(i) Stripping of cured coatings and adhesives.

(2) The requirements of R307-350-5 do not apply to the following:

(a) Stencil coatings;

(b) Safety-indicating coatings;

(c) Solid-film lubricants;

(d) Electric-insulating and thermal-conducting coatings;

(e) Magnetic data storage disk coatings; or

(f) Plastic extruded onto metal parts to form a coating.

(3) The requirements of R307-350-6 do not apply to the following:

(a) Touch-up coatings;

(b) Repair coatings; or

(c) Textured finishes.

R307-350-4. Definitions.

The following additional definitions apply to R307-350:

"Aerospace vehicles and component" means any fabricated part, processed part, assembly of parts, or completed unit, with the exception of electronic components, of any aircraft including but not limited to airplanes, helicopters, missiles, rockets and space vehicles.

"Air dried coating" means coatings that are dried by the use of air or a forced warm air at temperatures up to 194 degrees Fahrenheit.

"Baked coating" means coatings that are cured at a temperature at or above 194 degrees Fahrenheit.

"Camouflage coating" means coatings that are used, principally by the military, to conceal equipment from detection.

"Coating" means a material applied to a substrate for decorative, protective, or functional purposes.

(1) Such materials include, but are not limited to, paints, sealants, liquid plastic coatings, caulks, inks, adhesives, and maskants.

(2) Decorative, protective, or functional materials that consist only of protective oils for metal, acids, bases, or any combination of these substances, or paper film or plastic film which may be pre-coated with an adhesive by the film manufacturer, are not considered coatings.

"Coating application System" means all operations and equipment that applies, conveys, and dries a surface coating, including, but not limited to, spray booths, flow coaters, flash off areas, air dryers and ovens.

"Cured coating or adhesive" means a coating or adhesive, which

is dry to the touch.

"Department of Defense military technical data" means a specification that specifies design requirements, such as materials to be used, how a requirement is to be achieved, or how an item is to be fabricated or constructed.

"Dip coating" means a method of applying coatings to a substrate by submersion into and removal from a coating bath.

"Electric-insulating varnish" means a non-convertible-type coating applied to electric motors, components of electric motors, or power transformers, to provide electrical, mechanical, and environmental protection or resistance.

"Electric-insulating and thermal-conducting" means a coating that displays an electrical insulation of at least 1000 volts DC per mil on a flat test plate and an average thermal conductivity of at least 0.27 BTU per hour-foot-degree-Fahrenheit.

"Electrostatic application" means a method of applying coating particles or coating droplets to a grounded substrate by electrically charging them.

"Etching filler" mean a coating that contains less than 23% solids by weight and at least 0.5% acid by weight, and is used instead of applying a pretreatment coating followed by a primer.

"Extreme high-gloss coating" means a coating which, when tested by the American Society for Testing Material (ASTM) Test Method D-523 adopted in 1980, shows a reflectance of 75 or more on a 60 degree meter.

"Extreme performance coatings" means coatings designed for harsh exposure or extreme environmental conditions.

"Flow coat" means a non-atomized technique of applying coatings to a substrate with a fluid nozzle in a fan pattern with no air supplied to the nozzle.

"Heat-resistant coating" means a coating that must withstand a temperature of at least 400 degrees Fahrenheit during normal use.

"High-performance architectural coating" means a coating used to protect architectural subsections and which meets the requirements of the Architectural Aluminum Manufacturer Association's publication number AAMA 605.2-1980.

"High-temperature coating" means a coating that is certified to with-stand a temperature of 1,000 degrees Fahrenheit for 24 hours.

"High-volume, low-pressure (HVLP) spray" means a coating application system which is designed to be operated and which is operated between 0.1 and 10 pounds per square inch gauge (psig) air pressure, measured dynamically at the center of the air cap and the air horns.

"Magnetic data storage disk coating" means a coating used on a metal disk which stores data magnetically.

"Metallic coating" means a coating which contains more than 5 grams of metal particles per liter of coating, applied.

"Military specification coating" means a coating applied to metal parts and products and which has a formulation approved by a United States military agency for use on military equipment.

"Mold-seal coating" means the initial coating applied to a new

mold or repaired mold to provide a smooth surface which, when coated with a mold release coating, prevents products from sticking to the mold.

"Multi-component coating" means a coating requiring the addition of a separate reactive resin, commonly known as a catalyst or hardener, before application to form an acceptable dry film.

"One-component coating" means a coating that is ready for application as it comes out of its container to form an acceptable dry film. A thinner, necessary to reduce the viscosity, is not considered a component.

"Pan backing coating" means a coating applied to the surface of pots, pans, or other cooking implements that are exposed directly to a flame or other heating elements.

"Prefabricated architectural component coatings" means coatings applied to metal parts and products that are to be used as an architectural structure or their appurtenances including, but not limited to, hand railings, cabinets, bathroom and kitchen fixtures, fences, rain-gutters and down-spouts, window screens, lamp-posts, heating and air conditioning equipment, other mechanical equipment, and large fixed stationary tools.

"Pretreatment coating" means a coating which contains no more than 12% solids by weight, and at least 0.5% acid, by weight, is used to provide surface etching, and is applied directly to metal surfaces to provide corrosion resistance, adhesion, and ease of stripping.

"Primer" means a coating applied to a surface to provide a firm bond between the substrate and subsequent coats.

"Repair coating" means a coating used to recoat portions of a part or product which has sustained mechanical damage to the coating.

"Safety-indicating coating" means a coating which changes physical characteristics, such as color, to indicate unsafe condition.

"Silicone release coating" means any coating which contains silicone resin and is intended to prevent food from sticking to metal surfaces.

"Solar-absorbent coating" means a coating which has as its prime purpose the absorption of solar radiation.

"Solid-film lubricant" means a very thin coating consisting of a binder system containing as its chief pigment material one or more of molybdenum disulfide, graphite, polytetrafluoroethylene (PTEF) or other solids that act as a dry lubricant between faying surfaces.

"Stencil coating" means an ink or a coating which is rolled or brushed onto a template or stamp in order to add identifying letters or numbers to metal parts and products.

"Textured finish" means a rough surface produced by spraying and splattering large drops of coating onto a previously applied coating. The coatings used to form the appearance of the textured finish are referred to as textured coatings.

"Touch-up coating" means a coating used to cover minor coating imperfections appearing after the main coating operation.

"Vacuum-metalizing coating" means the undercoat applied to the substrate on which the metal is deposited or the overcoat applied directly to the metal film.

R307-350-5. [~~Emission Standards~~]VOC Content Limits.

(1) Each owner or operator shall not apply coatings with a VOC content in excess of the amounts specified in Table 1 or shall use an add-on control device as specified in R307-350-8.

TABLE 1

METAL PARTS AND PRODUCTS VOC CONTENT LIMITS
(values in pounds of VOC per gallon of coating, minus water and exempt solvents (compounds not classified as VOC)), as applied)

COATING CATEGORY	VOC CONTENT LIMITS	
	Air Dried	Baked
General One Component	2.8	2.3
General Multi Component	2.8	2.3
Camouflage	3.5	3.5
Electric-Insulating varnish	3.5	3.5
Etching Filler	3.5	3.5
Extreme High-Gloss	3.5	3.0
Extreme Performance	3.5	3.0
Heat-Resistant	3.5	3.0
High Performance architectural	6.2	6.2
High Temperature	3.5	3.5
Metallic	3.5	3.5
Military Specification	2.8	2.3
Mold-Seal	3.5	3.5
Pan Backing	3.5	3.5
Prefabricated Architectural Multi-Component	3.5	2.3
Prefabricated Architectural One-Component	3.5	2.3

Pretreatment Coatings	3.5	3.5
Repair and Touch Up	3.5	3.0
Silicone Release	3.5	3.5
Solar-Absorbent	3.5	3.0
Vacuum-Metalizing	3.5	3.5
Drum Coating, New, Exterior	2.8	2.8
Drum Coating, New, Interior	3.5	3.5
Drum Coating, Reconditioned, Exterior	3.5	3.5
Drum Coating, Reconditioned, Interior	4.2	4.2

(2) If more than one content limit indicated in this section applies to a specific coating, then the most stringent content limit shall apply.

R307-350-6. Application Methods.

No owner or operator of a facility shall apply VOC containing coatings to metal parts and products unless the coating is applied with equipment operated according to the equipment manufacturer specifications, and by the use of one of the following methods:

(1) Electrostatic application;
(2) Flow coat;
(3) Dip/electrodeposition coat;
(4) Roll coat;
(5) High-volume, low-pressure (HVLP) spray;
(6) Hand Application Methods;
(7) Airless or air-assisted airless spray may also be used for metal coatings with a viscosity of 15,000 centipoise or greater, as supplied; or
(8) Another application method capable of achieving transfer efficiency equivalent or better to HVLP spray, as certified by the manufacturer.

R307-350-7. Work Practices and Recordkeeping.

(1) Control techniques and work practices shall be implemented at all times to reduce VOC emissions[~~ from fugitive type sources~~]. Control techniques and work practices shall include, but are not limited to:

(a) Storing all VOC-containing coatings, thinners, and coating-related waste materials in closed containers;

(b) Ensuring that mixing and storage containers used for

VOC-containing coatings, thinners, and coating-related waste material are kept closed at all times except when depositing or removing these materials;

(c) Minimizing spills of VOC-containing coatings, thinners, and coating-related waste materials; and

(d) Conveying VOC-containing coatings, thinners, and coating-related waste materials from one location to another in closed container or pipes; and

(e) Minimizing VOC emission from cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.

(2) All persons shall perform solvent cleaning operations with cleaning material having VOC content of 0.21 pounds per gallon or less.

(3) All sources subject to R307-350 shall maintain records demonstrating compliance with[~~all provisions of~~] R307-350-5, R307-350-6, and R307-350-7(2)[~~on an annual basis~~].

(a) Records shall include, but not be limited to, inventory and product data sheets of all coatings and solvents subject to R307-350.

(b) These records shall be available to the director upon request.

R307-350-8. [~~Optional~~]Add-On Controls Systems Operations.

[~~(1) The owner or operator may install and maintain an incinerator, carbon adsorption, or any other add-on emission control device, provided that the emission control device will attain at least 90% efficiency performance.~~

~~(2) The owner or operator of a control device shall provide documentation that the emission control system will attain the requirements of R307-350-8.~~

~~(3) Emission control systems shall be operated and maintained in accordance with the manufacturer recommendations. The owner or operator shall maintain for a minimum of two years records of operating and maintenance sufficient to demonstrate that the equipment is being operated and maintained in accordance with the manufacturer recommendations.~~]

(1) The owner or operator shall install and maintain an incinerator, carbon adsorption, or any other add-on emission control system, provided that the emission control system is operated and maintained in accordance with the manufacturer recommendations in order to maintain at least 90% capture and control efficiency. Determination of overall capture and control efficiency shall be determined using EPA approved methods, as follows.

(a) The capture efficiency of a VOC emission control system's VOC collection device shall be determined according to EPA's "Guidelines for Determining Capture Efficiency," January 9, 1995 and 40 CFR Part 51, Appendix M, Methods 204-204F, as applicable.

(b) The control efficiency of a VOC emission control system's VOC control device shall be determined using test methods in Appendices

A-1, A-6, and A-7 to 40 CFR Part 60, for measuring flow rates, total gaseous organic concentrations, or emissions of exempt compounds, as applicable.

(c) An alternative test method may be substituted for the preceding test methods after review and approval by the EPA Administrator.

(2) The owner or operator of a control system shall provide documentation that the emission control system will attain the requirements of R307-350-8(1).

(3) The owner or operator shall maintain records of key system parameters necessary to ensure compliance with R307-350-8. Key system parameters may include, but are not limited to, temperature, pressure and flow rates. Operator inspection schedule, monitoring, recordkeeping, and key parameters shall be in accordance with the manufacturer's recommendations, and as required to demonstrate operations are providing continuous emission reduction from the source during all periods that the operations cause emissions from the source.

(4) The owner or operator shall maintain for a minimum of two years records of operating and maintenance sufficient to demonstrate that the equipment is being operated and maintained in accordance with the manufacturer recommendations.

[~~R307-350-9. Compliance Schedule.~~

~~All sources shall be in compliance with the requirements of R307-350 by January 1, 2014.~~]

KEY: air pollution, emission controls, coatings, miscellaneous metal parts

Date of Enactment or Last Substantive Amendment: [~~December 3, 2013~~]2014

Authorizing, and Implemented or Interpreted Law: 19-2-104(1)(a)

R307. Environmental Quality, Air Quality.
R307-352. Metal Container, Closure, and Coil Coatings.
R307-352-1. Purpose.

The purpose of this rule is to reduce volatile organic compound (VOC) emissions from the coating of metal coils, cans, pails, and lids in the manufacturing or reconditioning process.

R307-352-2. Applicability.

[~~(1)~~]R307-352 applies to sources located in Box Elder, Cache, Davis, Salt Lake, Tooele, Utah and Weber counties that have the potential to emit 2.7 tons per year or more of VOC, including related cleaning activities.

[~~(2) In Box Elder and Tooele counties, R307-352 applies to the following sources:~~

~~(a) Existing sources as of February 1, 2013 with the potential to emit 5 tons per year or more of VOC, including related cleaning activities; and~~

~~(b) New sources as of February 1, 2013 that have the potential to emit 2.7 tons per year or more of VOC, including related cleaning activities.~~]

R307-352-3. Definitions.

The following additional definitions apply to R307-352:

"Coating" means a protective, functional or decorative film applied in a thin layer to a surface.

"End sealing compound" means a compound which is coated onto can ends and which functions as a gasket when the end is assembled onto the can.

"Exterior body spray" means a coating sprayed on the exterior of the container body to provide a decorative or protective finish.

"Interior body spray" means a coating sprayed on the interior of the can body to provide a protective film between the product and the can.

"Metal container or closure coating" means any coating applied to either the interior or exterior of formed metal cans, pails, lids or crowns or flat metal sheets which are intended to be formed into cans, pails, lids or crowns.

"Overvarnish" means a coating applied directly over a design coating to reduce the coefficient of friction, to provide gloss and to protect the finish against abrasion and corrosion.

"Reconditioned pails or lids" means any metal container which is reused, recycled or remanufactured.

"Three-piece can side-seam coating" means a coating sprayed on the exterior and/or interior of a welded, cemented or soldered seam to protect the exposed metal.

"Two-piece can exterior-end coating" means a coating applied to the exterior bottom end of a can to reduce the coefficient of friction and to provide protection to the metal.

R307-352-4. [~~Emission Standards~~]VOC Content Limits.

Each owner or operator shall not apply coatings with a VOC content in excess of the amounts specified in Table 1 or shall use an add-on

control device as specified in R307-352-6.

TABLE 1

METAL CONTAINER AND CLOSURE COIL COATING LIMITATIONS
(values in pounds VOC per gallon of coating, minus water and exempt solvents (compounds not classified as VOC), as applied)

COATING CATEGORY	VOC [~~EMISSION RATES~~]CONTENT LIMITS
CANS	
Sheet basecoat (interior and exterior) and overvarnish	1.9
Two-piece can exterior basecoat, overvarnish, and end coating	2.1
Interior body spray	
Two-piece cans	3.5
Three-piece cans	3.0
Three-piece can side seam spray	5.5
End sealing compound: Food cans, non-food cans, and beverage cans	0.1
Exterior body spray	3.5
PAILS AND LIDS	
Body spray	
Reconditioned interior	4.2
Reconditioned exterior	3.5
New interior	3.5
New exterior	2.8
End sealing compound	0.5
Inks, all applications	2.5
Coil	
Coil coating	1.7

R307-352-5. Work Practices and Recordkeeping.

(1) The owner or operator shall:

(a) Store all VOC-containing coatings, thinners, and cleaning

materials in closed containers;
(b) Minimize spills of VOC-containing coatings, thinners, and cleaning materials;
(c) Clean up spills immediately;
(d) Convey any coatings, thinners, and cleaning materials in closed containers or pipes;
(e) Close mixing vessels that contain VOC coatings and other materials except when specifically in use; and
(f) Minimize usage of solvents during cleaning of storage, mixing, and conveying equipment.
(2) No person shall apply any coating unless the coating application method achieves a demonstrated 65% transfer efficiency.
The following applications achieve a minimum of 65% transfer efficiency and shall be operated in accordance with the manufacturers specifications:
(a) Electrostatic application;
(b) Flow coat;
(c) Roll coat;
(d) Dip coat;
(e) High-volume, low-pressure (HVLP) spray;
(f) Hand application methods;
(g) Printing techniques; or
(h) Other application method capable of achieving at least 65% transfer efficiency, as certified by the manufacturer.
(3) All persons shall perform solvent cleaning operations with cleaning material having VOC content of 0.21 lb/gallon or less.
(4) All sources subject to R307-352 shall maintain records demonstrating compliance with[~~ all provisions of~~] R307-352-4 and R307-352-5[~~ on an annual basis~~].
(a) Records shall include, but not be limited to, inventory and product data sheets of all coatings and solvents subject to R307-352.
(b) These records shall be made available to the director upon request.

R307-352-6. [~~Optional~~]Add-On Controls Systems Operations.

[~~(1) The owner or operator may install and maintain an incinerator, carbon adsorption, or any other add-on emission control device, provided that the emission control device will attain at least 90% efficiency performance.~~
~~(2) The owner or operator of a control device shall provide documentation that the emission control system will attain the requirements of R307-352-6.~~
~~(3) Emission control systems shall be operated and maintained in accordance with the manufacturer recommendations. The owner or operator shall maintain for a minimum of two years records of operating and maintenance sufficient to demonstrate that the equipment is being operated and maintained in accordance with the manufacturer recommendations.~~]
(1) The owner or operator shall install and maintain an incinerator, carbon adsorption, or any other add-on emission control system, provided that the emission control system is operated and

maintained in accordance with the manufacturer recommendations in order to maintain at least 90% capture and control efficiency. Determination of overall capture and control efficiency shall be determined using EPA approved methods, as follows.

(a) The capture efficiency of a VOC emission control system's VOC collection device shall be determined according to EPA's "Guidelines for Determining Capture Efficiency," January 9, 1995 and 40 CFR Part 51, Appendix M, Methods 204-204F, as applicable. (b) The control efficiency of a VOC emission control system's VOC control device shall be determined using test methods in Appendices A-1, A-6, and A-7 to 40 CFR Part 60, for measuring flow rates, total gaseous organic concentrations, or emissions of exempt compounds, as applicable.

(c) An alternative test method may be substituted for the preceding test methods after review and approval by the EPA Administrator.

(2) The owner or operator of a control system shall provide documentation that the emission control system will attain the requirements of R307-352-6(1).

(3) The owner or operator shall maintain records of key system parameters necessary to ensure compliance with R307-352-6. Key system parameters may include, but are not limited to, temperature, pressure and flow rates. Operator inspection schedule, monitoring, recordkeeping, and key parameters shall be in accordance with the manufacturer's recommendations, and as required to demonstrate operations are providing continuous emission reduction from the source during all periods that the operations cause emissions from the source.

(4) The owner or operator shall maintain for a minimum of two years records of operating and maintenance sufficient to demonstrate that the equipment is being operated and maintained in accordance with the manufacturer recommendations.

[~~R307-352-7. Compliance Schedule.~~

~~All sources within Box Elder, Cache, Davis, Salt Lake, Tooele, Utah and Weber counties shall be in compliance with this rule by January 1, 2014.~~]

KEY: air pollution, emission controls, metal containers, coil coatings

Date of Enactment or Last Substantive Amendment: [~~February 1, 2013~~]2014

Authorizing, and Implemented or Interpreted Law: 19-2-104(1)(a)

R307. Environmental Quality, Air Quality.
R307-353. Plastic Parts Coatings.
R307-353-1. Purpose.

The purpose of this rule is to limit volatile organic compound (VOC) emissions from the application of coatings to any plastic product.

R307-353-2. Applicability.

[~~(1)~~]R307-353 applies to plastic parts coating operations located in Box Elder, Cache, Davis, Salt Lake, Tooele, Utah and Weber counties that have the potential to emit 2.7 tons per year or more of VOC, including related cleaning activities.

[~~(2) In Box Elder and Tooele counties, R307-353 applies to the following sources:~~

~~(a) Existing sources as of May 1, 2013 with the potential to emit 5 tons per year or more of VOC, including related cleaning activities; and~~

~~(b) New sources as of May 1, 2013 that have the potential to emit 2.7 tons per year or more of VOC, including related cleaning activities.~~]

R307-353-3. Exemptions.

(1) The provisions of this rule shall not apply to any of the following:

(a) Stencil coatings;
(b) Safety-indicating coatings;
(c) Electric-insulating and thermal-conducting coatings;
(d) Magnetic data storage disk coatings;
(e) Plastic extruded onto metal parts to form a coating; and
(f) Textured finishes.

(2) If a coating line is subject to the requirements for existing automobile, light-duty truck, and other product and material coatings or for existing metallic surface coating lines, the coating line shall be exempt from this rule.

R307-353-4. Definitions.

The following additional definitions apply to R307-353:

"Air dried coating" means coatings that are dried by the use of air or a forced warm air at temperatures up to 194 degrees Fahrenheit.

"Baked coating" means coatings that are cured at a temperature at or above 194 degrees Fahrenheit.

"Coating" means a protective, functional, or decorative film applied in a thin layer to a surface. This term often applies to paints such as lacquers or enamels. It is also used to refer to films applied to paper, plastics, or foil.

"Electric-insulating and thermal-conducting" means a coating that displays an electrical insulation of at least 1000 volts DC per mil on a flat test plate and an average thermal conductivity of at least 0.27 BTU per hour-foot-degree-Fahrenheit.

"Magnetic data storage disk coating" means a coating used on

a metal disk which stores data magnetically.

"Metallic coating" means a coating which contains more than 5 grams of metal particles per liter of coating as applied.

"Military specification coating" means a coating which has a formulation approved by a United States military agency for use on military equipment.

"Mirror backing" means the coating applied over the silvered surface of a mirror.

"Mold-seal coating" means the initial coating applied to a new mold or a repaired mold to provide a smooth surface which, when coated with a mold release coating, prevents products from sticking to the mold.

"Multi-colored coating" means a coating which exhibits more than one color when applied, and which is packaged in a single container and applied in a single coat.

"Multi-component coating" means a coating requiring the addition of a separate reactive resin, commonly known as a catalyst, before application to form an acceptable dry film.

"One-component coating" means a coating that is ready for application as it comes out of its container to from an acceptable dry film. A thinner necessary to reduce the viscosity is not considered a component.

"Optical coating" means a coating applied to an optical lens.

"Plastic" means a substrate containing one or more resigns that may be solid, porous, flexible, or rigid, and includes fiber reinforced plastic composites.

"Primer" means a coating applied to a surface to provide a firm bond between the substrate and subsequent coats.

"Repair coating" means a coating used to recoat portions of a part or product which has sustained mechanical damage to the coating.

"Roller Coated" means a type of coating application equipment that utilizes a series of mechanical rollers to form a thin coating film on the surface of a roller, which is then applied to a substrate by moving the substrate underneath the roller.

"Safety-indicating coating" means a coating which changes physical characteristics, such as color, to indicate unsafe condition.

"Stencil coating" means an ink or a coating which is rolled or brushed onto a template or stamp in order to add identifying letters or numbers to metal parts and products.

"Textured finish" means a rough surface produced by spraying and splattering large drops of coating onto a previously applied coating. The coatings used to form the appearance of the textured finish are referred to as textured coatings.

"Touch-up coating" means a coating used to cover minor coating imperfections appearing after the main coating operation.

"Topcoat" means the last film-building finishing material applied in a finishing system. Non-permanent final finishes are not topcoats.

R307-353-5. [~~Emission Standards~~]VOC Content Limits.

(1) For automobile and truck plastic parts coating lines:

(a) Each owner or operator shall not apply coatings with a VOC content in excess of the amounts specified in Table 1 or shall use an add-on control device as specified in R307-353-8.

(b) For red and black coatings, the emission limitation shall be determined by multiplying the appropriate limit in Table 1 by 1.15.

(c) When EPA Method 24 is used to determine the VOC content of a high bake coating, the applicable emission limitation shall be determined by adding 0.5 to the appropriate limit in Table 1.

(d) When EPA Method 24 is used to determine the VOC content of an air-dried coating, the applicable emission limitation shall be determined by adding 0.1 to the appropriate limit in Table 1.

TABLE 1

AUTOMOBILE AND TRUCK PLASTIC PARTS COATING LINES
(values in pounds of VOC per gallon of coating, minus water and exempt solvents (compounds not classified as VOC), as applied)

COATING CATEGORY	VOC Content Limitations
High bake coating - exterior and interior parts	
Prime	
Flexible coating	4.5
Nonflexible coating	3.5
Topcoat	
Basecoat	4.3
Clearcoat	4.0
Non-basecoat/clearcoat	4.3
Air-dried coating - exterior parts	
Prime	4.8
Topcoat	
Basecoat	5.0
Clearcoat	4.5
Non-basecoat/clearcoat	5.0
Air-dried coating - interior parts	5.0

Touch-up and repair	5.2

(2) Each owner or operator of a business machine plastic parts coating line shall not apply coatings with a VOC content in excess of the amounts specified in Table 2 or shall use an add-on control device as specified in R307-353-8.

TABLE 2

BUSINESS MACHINE PLASTIC PARTS COATING LINES
(values in pounds of VOC per gallon of coating, minus water and exempt solvents (compounds not classified as VOC)), as applied)

COATING CATEGORY	VOC Content Limitations
Prime	2.9
Topcoat	2.9
Texture coat	2.9
Fog coat	2.2
Touch-up and repair	2.9

(3) Each owner or operator engaged in other plastic product coating operations shall not apply coatings with a VOC content in excess of the amounts specified in Table 3 or shall use an add-on control device as specified in R307-353-8.

TABLE 3

OTHER PLASTIC PRODUCT COATING CATEGORIES
(values in pounds of VOC per gallon of coating, minus water and exempt solvents (compounds not classified as VOC), as applied)

COATING CATEGORY	VOC Content Limitations
General One-Component	2.3
General Multi-Component	3.5
Electric Dissipating Coatings And Shock-Free Coatings	3.0
Extreme Performance	3.5 (2-pack coatings)
Metallic	3.5

Military Specification	2.8 (1 pack) 3.5 (2 pack)
Mold-Seal	6.3
Multi-colored Coatings	5.7
Optical Coatings	6.7
Vacuum-Metalizing	6.7
Mirror Backing	
Curtain Coated	4.2
Roll Coated	3.6

(4) If a part consists of both plastic and metal surfaces and is exempted from the requirements for existing metallic surface coating lines, the part shall be subject to this rule.

R307-353-6.Application Methods.

No person shall apply VOC containing coatings unless the coating is applied with equipment operated according to the manufacturer specifications, and by use of one of the following methods:

(1) Electrostatic application;
(2) Flow coat;
(3) Roller coat;
(4) Dip/electrodeposition coat;
(5) Airless Spray;
(6) High-volume, low-pressure (HVLP) spray; or
(7) Other application method equal to or better than HVLP, as certified by the manufacturer.

R307-353-7. Work Practices and Recordkeeping.

(1) The owner or operator shall:
(a) Store all VOC-containing coatings, thinners, and cleaning materials in closed containers;
(b) Minimize spills of VOC-containing coatings, thinners, and cleaning materials;
(c) Clean up spills immediately;
(d) Convey any coatings, thinners, and cleaning materials in closed containers or pipes;
(e) Close mixing vessels that contain VOC coatings and other materials except when specifically in use; and
(f) Minimize usage of solvents during cleaning of storage, mixing, and conveying equipment.
(2) All persons shall perform solvent cleaning operations with cleaning material having VOC content of 0.21 pounds per gallon or less.
(3) All sources subject to R307-353 shall maintain records demonstrating compliance with[~~all provisions of~~] R307-353-5,

R307-353-6 and R307-353-7(2)[~~ on an annual basis~~].

(a) Records shall include, but not be limited to, inventory and product data sheets of all coatings and solvents subject to R307-350.

(b) These records shall be made available to the director upon request.

R307-353-8. [~~Optional~~]Add-On Controls Systems Operations.

[~~ (1) The owner or operator may install and maintain an incinerator, carbon adsorption, or any other add-on emission control device, provided that the emission control device will achieve at least a 90% or greater emission reduction.~~

~~ (2) The owner or operator of a control device shall provide documentation that the emission control system will attain the requirements of R307-353-8(1).~~

~~ (3) Emission control systems shall be operated and maintained in accordance with the manufacturer recommendations. The owner or operator shall maintain for a minimum of two years records of operations and maintenance sufficient to demonstrate that the equipment is being operated and maintained in accordance with the manufacturer recommendations.~~]

(1) The owner or operator shall install and maintain an incinerator, carbon adsorption, or any other add-on emission control system, provided that the emission control system is operated and maintained in accordance with the manufacturer recommendations in order to maintain at least 90% capture and control efficiency. Determination of overall capture and control efficiency shall be determined using EPA approved methods, as follows.

(a) The capture efficiency of a VOC emission control system's VOC collection device shall be determined according to EPA's "Guidelines for Determining Capture Efficiency," January 9, 1995 and 40 CFR Part 51, Appendix M, Methods 204-204F, as applicable.

(b) The control efficiency of a VOC emission control system's VOC control device shall be determined using test methods in Appendices A-1, A-6, and A-7 to 40 CFR Part 60, for measuring flow rates, total gaseous organic concentrations, or emissions of exempt compounds, as applicable.

(c) An alternative test method may be substituted for the preceding test methods after review and approval by the EPA Administrator.

(2) The owner or operator of a control system shall provide documentation that the emission control system will attain the requirements of R307-353-8(1).

(3) The owner or operator shall maintain records of key system parameters necessary to ensure compliance with R307-353-8. Key system parameters may include, but are not limited to, temperature, pressure and flow rates. Operator inspection schedule, monitoring, recordkeeping, and key parameters shall be in accordance with the manufacturer's recommendations, and as required to demonstrate operations are providing continuous emission reduction from the source during all periods that the operations cause emissions from the source.

(4) The owner or operator shall maintain for a minimum of two years records of operating and maintenance sufficient to demonstrate that the equipment is being operated and maintained in accordance with the manufacturer recommendations.

[~~R307-353-9. Compliance Schedule.~~

~~All sources within Box Elder, Cache, Davis, Salt Lake, Tooele, Utah and Weber counties shall be in compliance with this rule by January 1, 2014.~~]

KEY: air pollution, emission controls, coatings, plastic parts
Date of Enactment or Last Substantive Amendment: [~~May 1, 2013~~]2014
Authorizing, and Implemented or Interpreted Law: 19-2-104(1)(a)

R307. Environmental Quality, Air Quality.
R307-354. Automotive Refinishing Coatings.
R307-354-1. Purpose.

The purpose of R307-354 is to limit volatile organic compound emissions (VOC) from automotive refinishing sources.

R307-354-2. Applicability.

(1) R307-354 applies to sources located in Box Elder, Cache, Davis, Salt Lake, Tooele, Utah and Weber counties that have the potential to emit 2.7 tons per year or more of VOC, including related cleaning activities.

[~~(2) In Box Elder and Tooele counties, R307-354 applies to the following sources:~~

~~(a) Existing sources as of February 1, 2013 with the potential to emit 5 tons per year or more of VOC, including related cleaning activities; and~~

~~(b) New sources as of February 1, 2013 that have the potential to emit 2.7 tons per year or more of VOC, including related cleaning activities.~~]

([~~3~~]2) The requirements of R307-354 shall not apply to any canned aerosol coating products.

R307-354-3. Definitions.

The following additional definitions apply to R307-354:

"Adhesion promoter" means a coating which is labeled and formulated to be applied to uncoated plastic surfaces to facilitate bonding of subsequent coatings, and on which, a subsequent coating is applied.

"Automotive" means passenger cars, vans, motorcycles, trucks, buses, golf carts and all other mobile equipment.

"Automotive refinishing" means the process of coating automobiles, after-market automobiles, motorcycles, light and medium-duty trucks and vans that are performed in auto body shops, auto repair shops, production paint shops, new car dealer repair and paint shops, fleet operation repair and paint shops, and any other facility which coats vehicles under the Standard Industrial Classification Code 7532 (Top, Body and Upholstery Repair Shops and Paint Shops). This includes dealer repair of vehicles damaged in transit. It does not include refinishing operations for other types of mobile equipment, such as farm machinery and construction equipment or their parts, including partial body collision repairs, that is subsequent to the original coating applied at an automobile original equipment manufacturing plant.

"Clear coating" means any coating that contains no pigments and is labeled and formulated for application over a color coating or clear coating.

"Coating" means a protective, decorative, or functional material applied in a thin layer to a surface. Such materials may include paints, topcoats, varnishes, sealers, stains, washcoats, basecoats, inks, and temporary protective coatings.

"Color coating" means any pigmented coating, excluding adhesion promoters, primers, and multi-color coatings, that requires a

subsequent clear coating and which is applied over a primer, adhesion promoter, or color coating. Color coatings include metallic and iridescent color coatings.

"Enclosed paint gun cleaner" means a cleaner consisting of a closed container with a door or top that can be opened and closed and fitted with cleaning connections. The spray gun is attached to a connection, and solvent is pumped through the gun and onto the exterior of the gun. Cleaning solvent falls back into the cleaner's solvent reservoir for recirculation.

"Metallic/Iridescent color coating" means a coating which contains iridescent particles, composed of either metal as metallic particles or silicon as mica particles, in excess of 0.042 pounds per gallon as applied, where such particles are visible in the dried film.

"Multi-color coating" means a coating which exhibits more than one color when applied, and which is packaged in a single container and applied in a single coat.

"Non-enclosed paint gun cleaner" means cleaner consisting of a basin similar to a sink in which the operator washes the outside of the gun under a solvent stream. The gun cup is filled with recirculated solvent, the gun tip is placed into a canister attached to the basin, and suction draws the solvent from the cup through the gun. The solvent gravitates to the bottom of the basin and drains through a small hole to a reservoir that supplies solvent to the recirculation pump.

"Pretreatment coating" means a coating which contains no more that 16% solids, by weight, and at least 0.5% acid, by weight, is used to provide surface etching, and is applied directly to bare metal surfaces to provide corrosion resistance and promote adhesion for subsequent coatings.

"Primer" means any coating which is labeled and formulated for application to a substrate to provide a bond between the substrate and subsequent coats; corrosion resistance; a smooth substrate surface; or resistance to penetration of subsequent coats, and on which a subsequent coating is applied. Primers may be pigmented.

"Single-stage coating" means any pigmented coating, excluding primers and multi-color coatings, labeled and formulated for application without a subsequent clear coat. Single-stage coatings include single-stage metallic/iridescent coatings.

"Solids" means the part of the coating that remains after the coating is dried or cured; solids content is determined using data from EPA Method 24.

"Temporary protective coating" means any coating which is labeled and formulated for the purpose of temporarily protecting areas form overspray or mechanical damage.

"Topcoat" means any coating or series of coatings applied over a primer or an existing finish for the purpose of protection or beautification.

"Truck bed liner coating" means any coating, excluding clear, color, multi-color, and single-stage coatings, labeled and formulated for application to a truck bed to protect it from surface abrasion.

"Underbody coating" means any coating labeled and formulated

for application to wheel wells, the inside of door panels or fenders, the underside of a trunk or hood, or the underside of the motor vehicle.

"Uniform finish coating" means any coating labeled and formulated for application to the area around a spot repair for the purpose of blending a repaired area's color or clear coat to match the appearance of an adjacent area's existing coating. Prior to May 1, 2013, this coating category may be referred to as uniform finish blenders.

"Uniform finish blender" means a coating designed to blend a repaired topcoat into an existing topcoat.

R307-354-4. [~~Emission Standards~~]VOC Content Limits.

Each owner or operator shall not apply coatings with a VOC content in excess of the amounts specified in Table 1 or shall use an add-on control device as specified in R307-354-6.

TABLE 1

AUTOMOTIVE REFINISHING VOC LIMITS
(values in pounds of VOC per gallon of coating, minus water and exempt solvent (compounds not defined as VOC), as applied)

COATING CATEGORY	VOC [~~EMISSION RATES~~]CONTENT LIMITS
Adhesion Promoter	4.5
Clear Coating	2.1
Color Coating	3.5
Multi-color Coating	5.7
Pretreatment Coating	5.5
Primer	2.1
Primer Sealer	2.1
Single-stage Coating	2.8
Temporary Protective Coating	0.5
Truck Bed Liner Coating	2.6
Underbody Coating	3.6
Uniform Finish Coating	4.5
Any Other Coating Type	2.1

R307-354-5. Work Practice and Recordkeeping.

(1) Control techniques and work practices are to be implemented

at all times to reduce VOC emissions[~~ from fugitive type sources~~]. Control techniques and work practices include:

(a) Tight fitting covers for open tanks;

(b) Covered containers for solvent wiping cloths;

(c) Collection hoods for areas where solvent is used for cleanup;

(d) Minimizing spill of VOC-containing cleaning materials;

(e) Conveying VOC-containing materials from one location to another in closed containers or pipes; and

(f) Cleaning spray guns in enclosed systems or a non-enclosed paint gun cleaner may be used if the vapor pressure of the cleaning solvent is less than 100 mm Hg at 68 degrees Fahrenheit and the solvent is directed towards a drain that leads directly to an enclosed remote reservoir.

(2) Application equipment requirements:

(a) A person shall not apply any coating to an automotive part or component unless the coating application method achieves a demonstrated 65% transfer efficiency.

(b) The following coating application methods have been demonstrated to achieve a minimum of 65% transfer efficiency:

(i) Brush, dip or roll coating operated in accordance with the manufacturers specifications;

(ii) Electrostatic application equipment operated in accordance with the manufacturers specifications; and

(iii) High Volume, Low Pressure spray equipment operated in accordance with the manufacturers specifications.

(c) Other coating application methods may be used that have been demonstrated to be capable of achieving at least 65% transfer efficiency, as certified by the manufacturer.

(3) All sources subject to R307-354 shall maintain records demonstrating compliance with[~~ all provisions of~~] R307-354-4 and R307-354-5[~~ on an annual basis~~].

(a) Records shall include, but not be limited to, inventory and product data sheets of all coatings and solvents subject to R307-354.

(b) These records shall be available to the director upon request.

R307-354-6. [~~Optional~~]Add-On Controls Systems Operations.

[~~(1) The owner or operator may install and maintain an incinerator, carbon adsorption, or any other add-on emission control device, provided that the emission control device will attain at least 90% efficiency performance.~~

~~(2) The owner or operator of a control device shall provide documentation that the emission control system will attain the requirements of R307-354-6.~~

~~(3) Emission control systems shall be operated and maintained in accordance with the manufacturer recommendations. The owner or operator shall maintain for a minimum of two years records of operating and maintenance sufficient to demonstrate that the equipment is being operated and maintained in accordance with the manufacturer recommendations.~~]

(1) The owner or operator shall install and maintain an incinerator, carbon adsorption, or any other add-on emission control system, provided that the emission control system is operated and maintained in accordance with the manufacturer recommendations in order to maintain at least 90% capture and control efficiency. Determination of overall capture and control efficiency shall be determined using EPA approved methods, as follows.

(a) The capture efficiency of a VOC emission control system's VOC collection device shall be determined according to EPA's "Guidelines for Determining Capture Efficiency," January 9, 1995 and 40 CFR Part 51, Appendix M, Methods 204-204F, as applicable.

(b) The control efficiency of a VOC emission control system's VOC control device shall be determined using test methods in Appendices A-1, A-6, and A-7 to 40 CFR Part 60, for measuring flow rates, total gaseous organic concentrations, or emissions of exempt compounds, as applicable.

(c) An alternative test method may be substituted for the preceding test methods after review and approval by the EPA Administrator.

(2) The owner or operator of a control system shall provide documentation that the emission control system will attain the requirements of R307-354-6(1).

(3) The owner or operator shall maintain records of key system parameters necessary to ensure compliance with R307-354-6. Key system parameters may include, but are not limited to, temperature, pressure and flow rates. Operator inspection schedule, monitoring, recordkeeping, and key parameters shall be in accordance with the manufacturer's recommendations, and as required to demonstrate operations are providing continuous emission reduction from the source during all periods that the operations cause emissions from the source.

(4) The owner or operator shall maintain for a minimum of two years records of operating and maintenance sufficient to demonstrate that the equipment is being operated and maintained in accordance with the manufacturer recommendations.

[~~R307-354-7. Compliance Schedule.~~

~~All sources within Box Elder, Cache, Davis, Salt Lake, Tooele, Utah, and Weber counties shall be in compliance with this rule by July 1, 2014.~~]

KEY: air pollution, automotive refinishing, VOC, coatings
Date of Enactment or Last Substantive Amendment: [~~February 1, 2013~~]2014
Authorizing, and Implemented or Interpreted Law: 19-2-104(1)(a)

R307. Environmental Quality, Air Quality.
R307-355. Control of Emissions from Aerospace Manufacture and Rework Facilities.
R307-355-1. Purpose.

The purpose of R307-355 is to limit the emissions of volatile organic compounds (VOCs) from aerospace coatings and adhesives, from organic solvent cleaning, and from the storage and disposal of solvents and waste solvent materials associated with the use of aerospace coatings and adhesives.

R307-355-2. Applicability.

R307-355 applies to all aerospace manufacture and rework facilities that have the potential to emit 10 tons or more per year of VOCs and that are located in Box Elder, Cache, Davis, Salt Lake, Utah, Tooele and Weber counties.

R307-355-3. Exemptions.

(1) R307-355 does not apply:

(a) Where cleaning and coating takes place in research and development, quality control, laboratory testing and electronic parts and assemblies, except for cleaning and coating of completed assemblies;

(b) To manufacturing or rework operations involving space vehicles; and

(c) To rework operations performed on antique aerospace vehicles or components.

R307-355-4. Definitions.

The following additional definitions apply to R307-355:

"Aerospace manufacture" and "rework facility" means any installation that produces, reworks, or repairs in any amount any commercial, civil, or military aerospace vehicle or component.

"Antique aerospace vehicle or component" means an aircraft or component thereof that was built at least 30 years ago and would not routinely be in commercial or military service in the capacity for which it was designed.

"Chemical milling maskants" means a coating that is applied directly to aluminum components to protect surface areas when chemical milling the component with a Type I or Type II etchant. Type I chemical milling maskants are used with a Type I etchant and Type II chemical milling maskants are used with a Type II etchant.

"Exempt solvents" means organic chemicals that are not defined as VOC.

"General aviation rework facility" means any aerospace installation with the majority of its revenues resulting from the reconstruction, repair, maintenance, repainting, conversion, or alteration of general aviation aerospace vehicles or components.

"Low vapor pressure hydrocarbon-based cleaning solvent" means a cleaning solvent that is composed of a mixture of photochemically reactive hydrocarbons and oxygenated hydrocarbons and has a maximum vapor pressure of 7 mm Hg at 68 degrees Fahrenheit. These cleaners

must not contain hazardous air pollutants.

"Space vehicle" means a man-made device, either manned or unmanned, designed for operation beyond earth's atmosphere. This definition includes integral equipment such as models, mock-ups, prototypes, mold, jigs, tooling, hardware jackets and test coupons. Also included, auxiliary equipment associated with test, transport and storage that through contamination can compromise the space vehicle performance.

"Specialty coating" means a coating that, even though it meets the definition of a primer, topcoat, or self-priming topcoat, has additional performance criteria beyond those of primers, topcoats, and self-priming topcoats for specific applications.

(1) These performance criteria may include, but are not limited to, temperature or fire resistance, substrate compatibility, antireflection, temporary protection or marking, sealing, adhesively joining substrates, or enhanced corrosion protection.

(2) Individual specialty coatings are defined in Appendix A of 40 CFR 63 subpart GG, which is incorporated by reference.

"Topcoat" means a coating that is applied over a primer or component for appearance, identification, camouflage, or protection. Topcoats that are defined as specialty coatings are not included under this definition.

R307-355-5. [~~Emission Standards~~]VOC Content Limits.

(1) The owner or operator shall not [~~cause, permit, or allow~~]apply [~~the emissions of VOCs from the~~]coatings to aerospace vehicles or components with a VOC content in excess as follows[~~of aerospace vehicles or components to exceed~~]:

(a) 2.9 pounds per gallon of coating, excluding water and exempt solvents, delivered to a coating applicator that applies primers. For general aviation rework facilities, the VOC limitation shall be 4.5 pounds per gallon of coating, excluding water and exempt solvents, delivered to a coating applicator that applies primers;

(b) 3.5 pounds per gallon of coating, excluding water and exempt solvents, delivered to a coating applicator that applies topcoats (including self-priming topcoats). For general aviation rework facilities, the VOC limit shall be 4.5 pounds per gallon of coating, excluding water and exempt solvents, delivered to a coating applicator that applies topcoats (including self-priming topcoats);

(c) 5.2 pounds per gallon of coating, excluding water and exempt solvents, delivered to a coating applicator that applies Type I chemical milling maskant;

(d) 1.3 pounds per gallon of coating, excluding water and exempt solvents, delivered to a coating applicator that applies Type II chemical milling maskants; and

(e) Emissions of VOCs from specialty coatings in excess of the amounts specified in EPA-453/R-97-004, December 1997, page B-2, hereby incorporated by reference.

(2) The owner or operator may alternatively comply with R307-355-5(1)(a) through (d) by using an add-on control device as specified in R307-355-9.

(3) The following coating applications are exempt from the VOC content limits in R307-355-5(1);
(a) Touchup and repair operations.
(b) Use of hand-held spray can application method.
(c) Department of Defense classified coatings.
(d) Coatings of space vehicles.
(e) Facilities that use separate formulations in volumes of less than 50 gallons per year subject to a maximum exemption of 200 gallons total for such formulations applied annually.

R307-355-6. Application Method.
(1) No owner or operator shall apply any primer or topcoat unless the primer and topcoat is applied with equipment operated according to the equipment manufacturer specifications or by the use of one of the following methods:
(a) Electrostatic application;
(b) Flow/curtain coat;
(c) Dip/electrodeposition coat;
(d) Roll coat;
(e) Brush coating;
(f) cotton-tipped swab application;
(g) High-Volume, Low-Pressure (HVLP) Spray;
(h) Hand Application Methods; or
(i) Other coating application methods that achieve emission reductions equivalent to HVLP or electrostatic spray application methods, as determined according to the requirements in 40 CFR 63.750(i).
(2) The following conditions are exempt from R307-355-6(1):
(a) Any situation that normally requires the use of an airbrush or an extension on the spray gun to properly reach limited access spaces.
(b) The application of coatings that contain fillers that adversely affect atomization with HVLP spray guns and that cannot be applied by any of the application methods specified in R307-355-6.
(c) The application of coatings that normally have dried film thickness of less than 0.0013 centimeters (0.0005 inches) and that cannot be applied by any of the application methods specified in R307-355-6.
(d) The use of airbrush application methods for stenciling, lettering, and other identification markings.
(e) The use of hand-held spray can application methods.
(f) Touch-up and repair operations.
(g) Application of specialty coatings.

R307-355-7. Work Practices and Recordkeeping.
(1) Control techniques and work practices shall be implemented at all times to reduce VOC emissions[~~ from fugitive type sources~~]. Control techniques and work practices shall include, but are not limited to:
(a) Storing all VOC-containing coatings, adhesives, thinners, and coating-related waste materials in closed containers;

(b) Ensuring that mixing and storage containers used for VOC-containing coatings, adhesives, thinners, and coating-related waste material are kept closed at all times except when depositing or removing these materials;

(c) Minimizing spills of VOC-containing coatings, adhesives, thinners, and coating-related waste materials; and

(d) Conveying VOC-containing coatings, adhesives, thinners, and coating-related waste materials from one location to another in closed container or pipes.

(2) All sources subject to R307-355 shall maintain records demonstrating compliance with[~~all provisions of~~] R307-355-5, R307-355-6 and R307-355-8[~~on an annual basis~~].

(a) Records shall include, but not be limited to, inventory and product data sheets of all coatings and solvents subject to R307-355.

(b) These records shall be available to the Director upon request.

R307-355-8. Solvent Cleaning.

(1) Hand-wipe cleaning. Cleaning solvents used in hand-wipe cleaning operations shall meet one of the following requirements:

(a) Have a VOC composite vapor pressure less than or equal to 45 mm Hg at 68 degrees Fahrenheit;

(b) Have an aqueous cleaning solvent in which water is at least 80% of the solvent as applied; or

(c) Have a low vapor pressure hydrocarbon-based cleaning solvent.

(2) The following exemptions apply:

(a) Cleaning during the manufacture, assembly, installation, maintenance, or testing of components of breathing oxygen systems that are exposed to the breathing oxygen.

(b) Cleaning during the manufacture, assembly, installation, maintenance, or testing of parts, subassemblies, or assemblies that are exposed to strong oxidizers or reducers (e.g., nitrogen tetroxide, liquid oxygen, hydrazine).

(c) Cleaning and surface activation prior to adhesive bonding.

(d) Cleaning of electronics parts and assemblies containing electronics parts.

(e) Cleaning of aircraft and ground support equipment fluid systems that are exposed to the fluid, including air-to-air heat exchangers and hydraulic fluid systems.

(f) Cleaning of fuel cells, fuel tanks, and confined spaces.

(g) Surface cleaning of solar cells, coated optics, and thermal control surfaces.

(h) Cleaning during fabrication, assembly, installation, and maintenance of upholstery, curtains, carpet, and other textile materials used on the interior of the aircraft.

(i) Cleaning of metallic and nonmetallic materials used in honeycomb cores during the manufacture or maintenance of these cores, and cleaning of the completed cores used in the manufacture of aerospace vehicles or components.

(j) Cleaning of aircraft transparencies, polycarbonate, or glass substrates.

(k) Cleaning and solvent usage associated with research and development, quality control, or laboratory testing.

(l) Cleaning operations, using nonflammable liquids, conducted within five feet of energized electrical systems.

(3) Flush cleaning. Cleaning solvents used in flush cleaning of parts, assemblies and coating unit components must be emptied into an enclosed container or collection system that is kept closed when not in use.

(4) Spray gun cleaning. All spray guns shall be cleaned by one or more of the following methods:

(a) Enclosed system that is closed at all times except when inserting or removing the spray gun. If leaks in the system are found, repairs shall be made as soon as practicable, but no later than 15 days after the leak was found. If the leak is not repaired by the 15th day, the cleaning solvent shall be removed and the enclosed cleaner shall be shut down until the leak is repaired or its use is permanently discontinued.

(b) Nonatomized cleaning.

(i) Spray guns shall be cleaned by placing cleaning solvent in the pressure pot and forcing it through the gun with the atomizing cap in place.

(ii) No atomizing air is to be used.

(iii) The cleaning solvent from the spray gun shall be directed into a vat, drum, or other waste container that is closed when not in use.

(c) Disassembled spray gun cleaning.

(i) Spray guns shall be cleaned by disassembling and cleaning the components by hand in a vat, which shall remain closed at all times except when in use.

(ii) Spray gun components shall be soaked in a vat, which shall remain closed during the soaking period and when not inserting or removing components.

(d) Atomizing spray into a waste container that is fitted with a device designed to capture atomized solvent emissions.

(e) Cleaning of the nozzle tips of automated spray equipment systems, except for robotic systems that can be programmed to spray into a closed container, shall be exempt from these requirements.

R307-355-9. [~~Optional~~]Add-On Controls Systems Operations.

[~~(1) The owner or operator may install and maintain an incinerator, carbon adsorption, or any other add-on emission control device, provided that the emission control device will attain at least 81% efficiency performance.~~

~~(2) The owner or operator of a control device system shall provide documentation that the emission control system will attain the requirements of R307-355-9.~~

~~(3) Emission control systems shall be operated and maintained in accordance with the manufacturer recommendations. The owner or operator shall maintain for a minimum of two years records of operating~~

~~and maintenance sufficient to demonstrate that the equipment is being operated and maintained in accordance with the manufacturer recommendations.~~]

(1) The owner or operator shall install and maintain an incinerator, carbon adsorption, or any other add-on emission control system, provided that the emission control system is operated and maintained in accordance with the manufacturer recommendations in order to maintain at least 81% capture and control efficiency. Determination of overall capture and control efficiency shall be determined using EPA approved methods, as follows.

(a) The capture efficiency of a VOC emission control system's VOC collection device shall be determined according to EPA's "Guidelines for Determining Capture Efficiency," January 9, 1995 and 40 CFR Part 51, Appendix M, Methods 204-204F, as applicable.

(b) The control efficiency of a VOC emission control system's VOC control device shall be determined using test methods in Appendices A-1, A-6, and A-7 to 40 CFR Part 60, for measuring flow rates, total gaseous organic concentrations, or emissions of exempt compounds, as applicable.

(c) An alternative test method may be substituted for the preceding test methods after review and approval by the EPA Administrator.

(2) The owner or operator of a control system shall provide documentation that the emission control system will attain the requirements of R307-355-9(1).

(3) The owner or operator shall maintain records of key system parameters necessary to ensure compliance with R307-355-9. Key system parameters may include, but are not limited to, temperature, pressure and flow rates. Operator inspection schedule, monitoring, recordkeeping, and key parameters shall be in accordance with the manufacturer's recommendations, and as required to demonstrate operations are providing continuous emission reduction from the source during all periods that the operations cause emissions from the source.

(4) The owner or operator shall maintain for a minimum of two years records of operating and maintenance sufficient to demonstrate that the equipment is being operated and maintained in accordance with the manufacturer recommendations.

[~~R307-355-10. Compliance Schedule.~~

~~All sources within Box Elder, Cache, Davis, Salt Lake, Tooele, Utah and Weber counties shall be in compliance by January 1, 2014.~~]

KEY: air pollution, coating, aerospace
Date of Enactment or Last Substantive Amendment: [~~February 1, 2013~~]2014
Authorizing, and Implemented or Interpreted Law: 19-2-104(1)(a)

ITEM 6

Title V Fee Restructuring

State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQO-000625-14

June 25, 2014

Dear Title V Fee Stakeholder:

The Utah Division of Air Quality (DAQ) is investigating the restructuring of the Title V program fees. Currently we charge each Title V source a dollar per ton fee per each ton of emissions up to 4,000 tons per each pollutant. The restructured fee would allow for variable fees to be charged for different pollutants (such as hazardous air pollutants), raise the fee cap, and provide for a minimum fee to be charged for small Title V area sources.

DAQ is proposing to change the Utah State Statute at 19-2-109.1 so that we are able to propose the restructured fees in our annual budget request to the legislature. The statute changes would allow for the following fees to be requested each year:

- Continue to Charge a per ton fee for criteria pollutants (currently approved at $59.06 per ton for FY2015)
- Charge a per ton fee greater than the criteria pollutant fee for each ton of Hazardous Air Pollutant (HAP) emitted (i.e. $150.00 per ton of HAP emitted)
- Charge a minimum fee of $250.00 per year for any source that is billed, where the tonnage based fee falls below $250.00
- Raise the tonnage cap from the current 4000 tons to 7000 tons per pollutant (for FY2016 we project there will be 2 different sources that will have a total of 4 pollutants reach the cap level)

Due to a projected large decrease in chargeable pollution emissions for 2015, and under the current system (charging the same fee for all pollutants, 4000 ton cap, and no minimum fee), the fee for FY2016 will need to be increased to $72.84 per ton of emissions, a $13.78 increase. The new fee structure would allow the criteria pollutant fee to be reduced by $1.00 to $2.00 per ton, and still maintain full program funding.

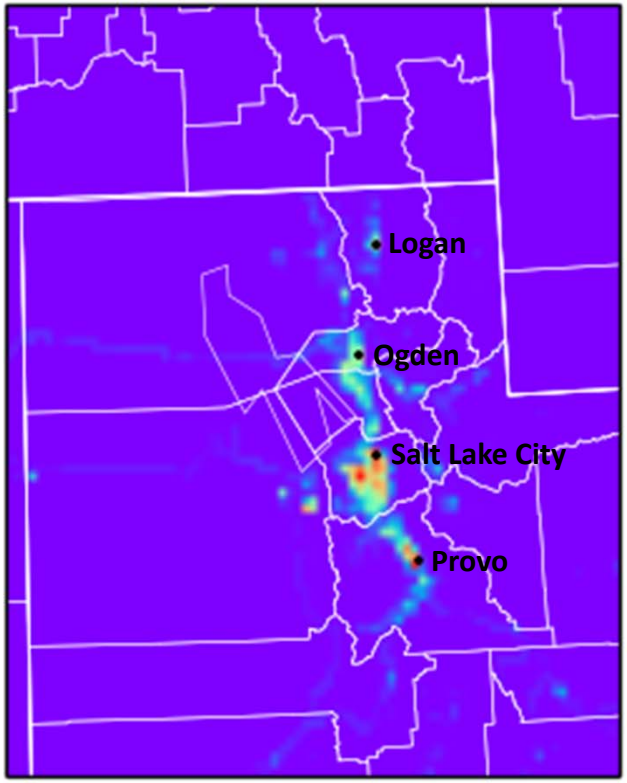
A stakeholder meeting to discuss this proposal will be held Monday July 14, 2014, at 1:00 p.m. in the DEQ 1st floor board room, Room 1015, of the Multi State Office Building (MASOB). The MASOB is located at 195 North 1950 West, in Salt Lake City. You may also participate in the meeting by calling in to 1-877-820-7831, then dial 915298# to access the meeting.

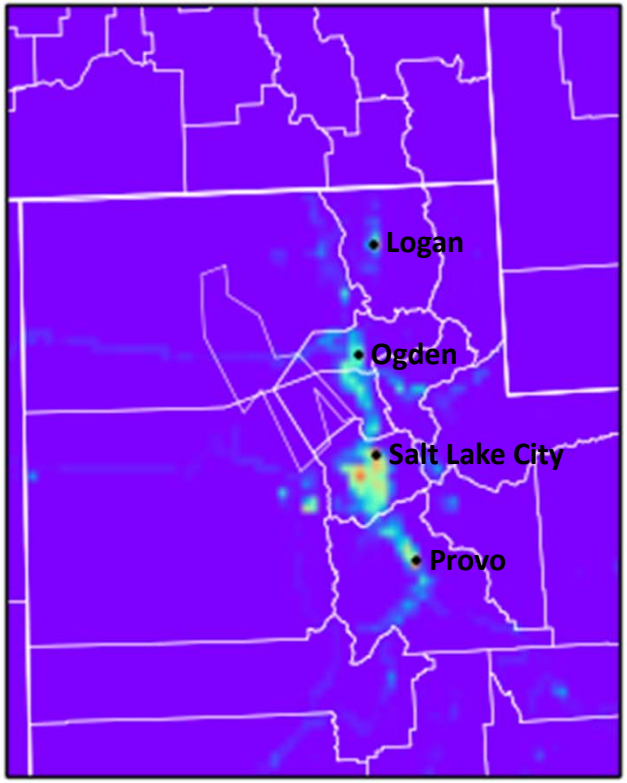
For any questions concerning the Title V fee restructuring, contact David Beatty, Operating Permits Manager at dbeatty@utah.gov or 801-536-4060.

Additional information is available on the following web site:
http://www.deq.utah.gov/Permits/air/titlevpermits/index.htm
As more information becomes available it will be added to the web page.

Water Heater Low NOx Analysis

Projected 2019 NOx





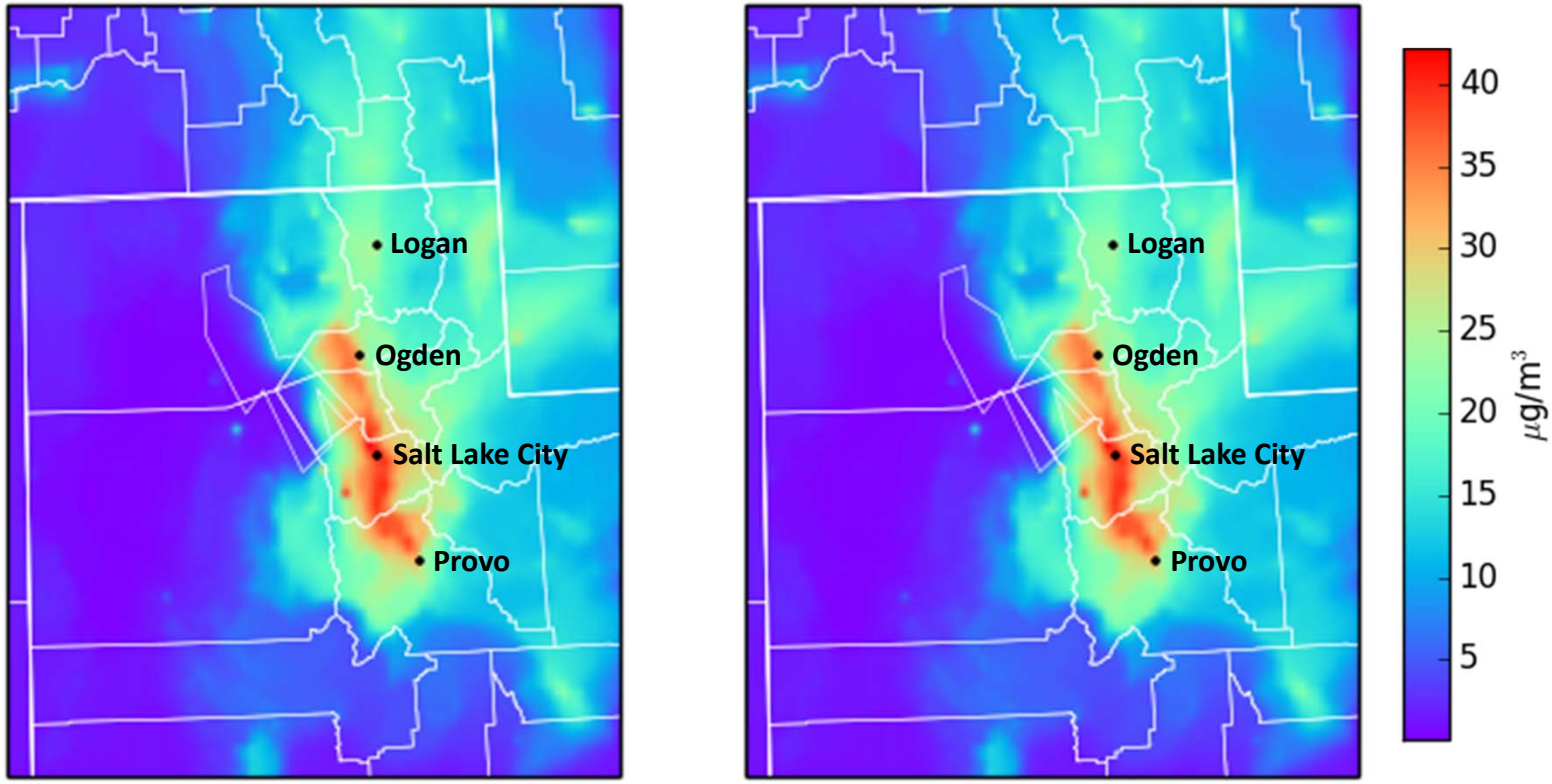
with low NOx water heaters assuming all homes converted over

tons/day of NOx removed per county

(percentage reduced from Area sources):

Salt Lake	Utah	Davis	Weber	Tooele	Cache	Box Elder
2.54	*2.04*	*0.92*	*0.90*	*0.44*	*0.41*	*0.26*
(15%)	*(23%)*	*(18%)*	*(18%)*	*(11%)*	*(17%)*	*(7%)*

Projected 2019 PM2.5 Concentrations



with low NOx water heaters assuming all homes converted over

Modeled $PM_{2.5}$ reduction along Wasatch Front is approximately **0.1 -> 0.4** µg/m³ due to low NOx water heaters.

Air Toxics

Compliance Monitoring

State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQA-453-14

M E M O R A N D U M

TO: Air Quality Board

FROM: Bryce C. Bird, Executive Secretary

DATE: June 6, 2014

SUBJECT: Air Toxics, Lead-Based Paint, and Asbestos (ATLAS) Section Compliance Activities – May 2014

MACT Compliance Inspections	5
Asbestos Demolition/Renovation NESHAP Inspections	62
Asbestos AHERA Inspections	54
Asbestos State Rules Only Inspections	3
Asbestos Notifications Accepted	194
Asbestos Telephone Calls Answered	512
Asbestos Individuals Certifications Approved/Disapproved	135/0
Asbestos Company Certifications/Re-certifications	4/3
Asbestos Alternate Work Practices Approved/Disapproved	7/0
Lead-Based Paint (LBP) Inspections	3
LBP Notifications Approved	1
LBP Telephone Calls Answered	69
LBP Letters Prepared and Mailed	62
LBP Courses Reviewed/Approved	1/1
LBP Course Audits	0
LBP Individual Certifications Approved/Disapproved	25/0

LBP Firm Certifications	9
Notices of Violation Issued	0
Compliance Advisories Issued	11
Warning Letters Issued	7
Settlement Agreements Finalized	1
Penalties Agreed to:	
Bryan Wilmot/Utah Correctional Industries	$4,800.00

State of Utah
GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQC-710-14

M E M O R A N D U M

TO: Air Quality Board

FROM: Bryce C. Bird, Executive Secretary

DATE: June 10, 2014

SUBJECT: Compliance Activities – May 2014

Annual Inspections Conducted:

Major..... 11
Synthetic Minor 5
Minor 27

On-Site Stack Test Audits Conducted: 8

Stack Test Report Reviews: 10

On-Site CEM Audits Conducted: 29

Emission Reports Reviewed: 12

Temporary Relocation Requests Reviewed & Approved: 5

Fugitive Dust Control Plans Reviewed & Accepted:..... 111

Open Burning Permits Issued 2,079

Soil Remediation Report Reviews: 1

[1]Miscellaneous Inspections Conducted:..... 13

Complaints Received: 44

195 North 1950 West • Salt Lake City, Utah
Mailing Address: P.O. Box 144820 • Salt Lake City, Utah 84114-4820
Telephone (801) 536-4000 • Fax (801)536-4099 • T.D.D. (801) 536-4414
www.deq.utah.gov

Breakdown Reports Received:..... 1
Compliance Actions Resulting From a Breakdown..... 0

Warning Letters Issued: 0

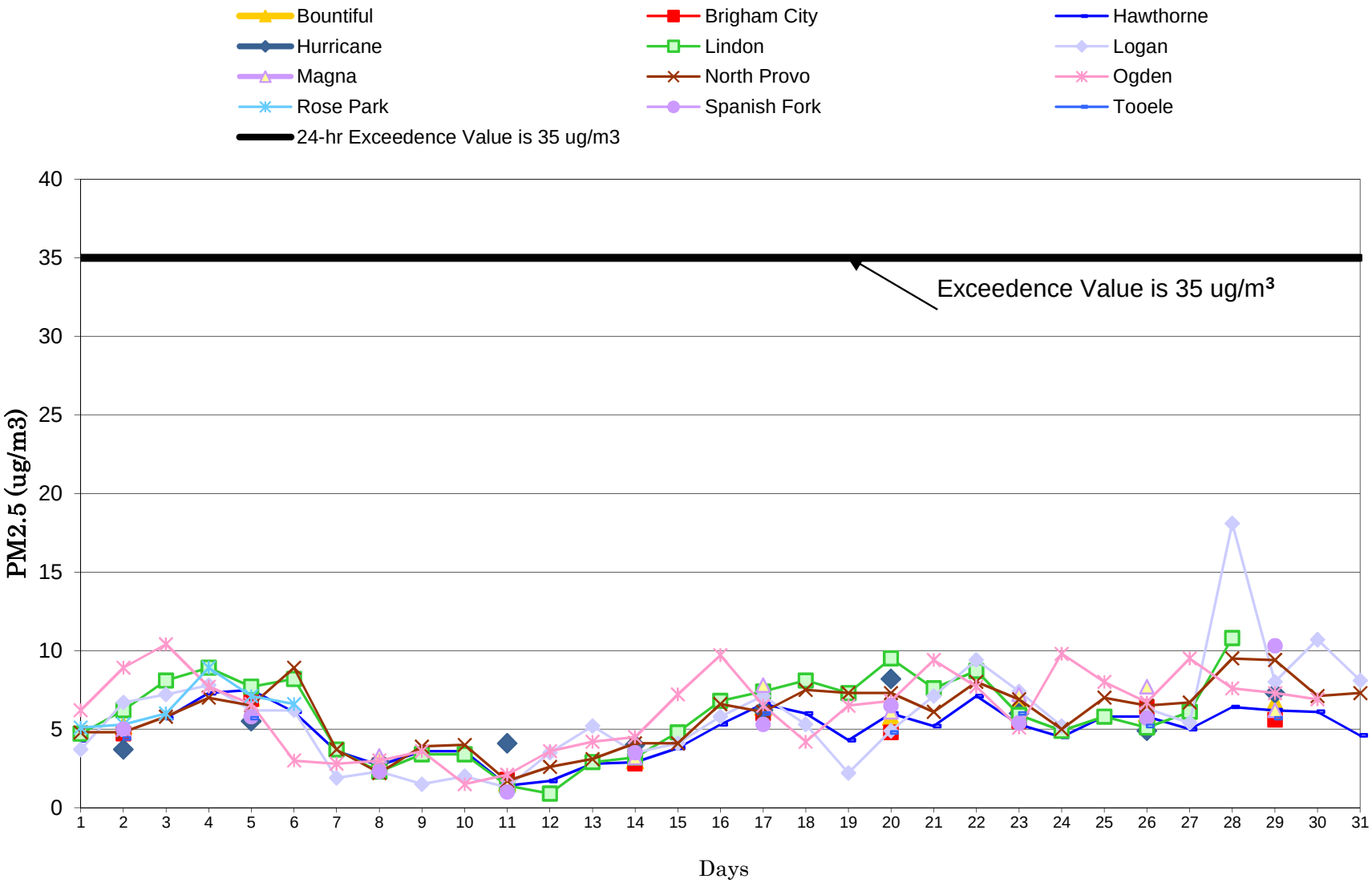
Notices of Violation Issued:..... 0

Compliance Advisories Issued:..... 5

Settlement Agreements Reached: 0

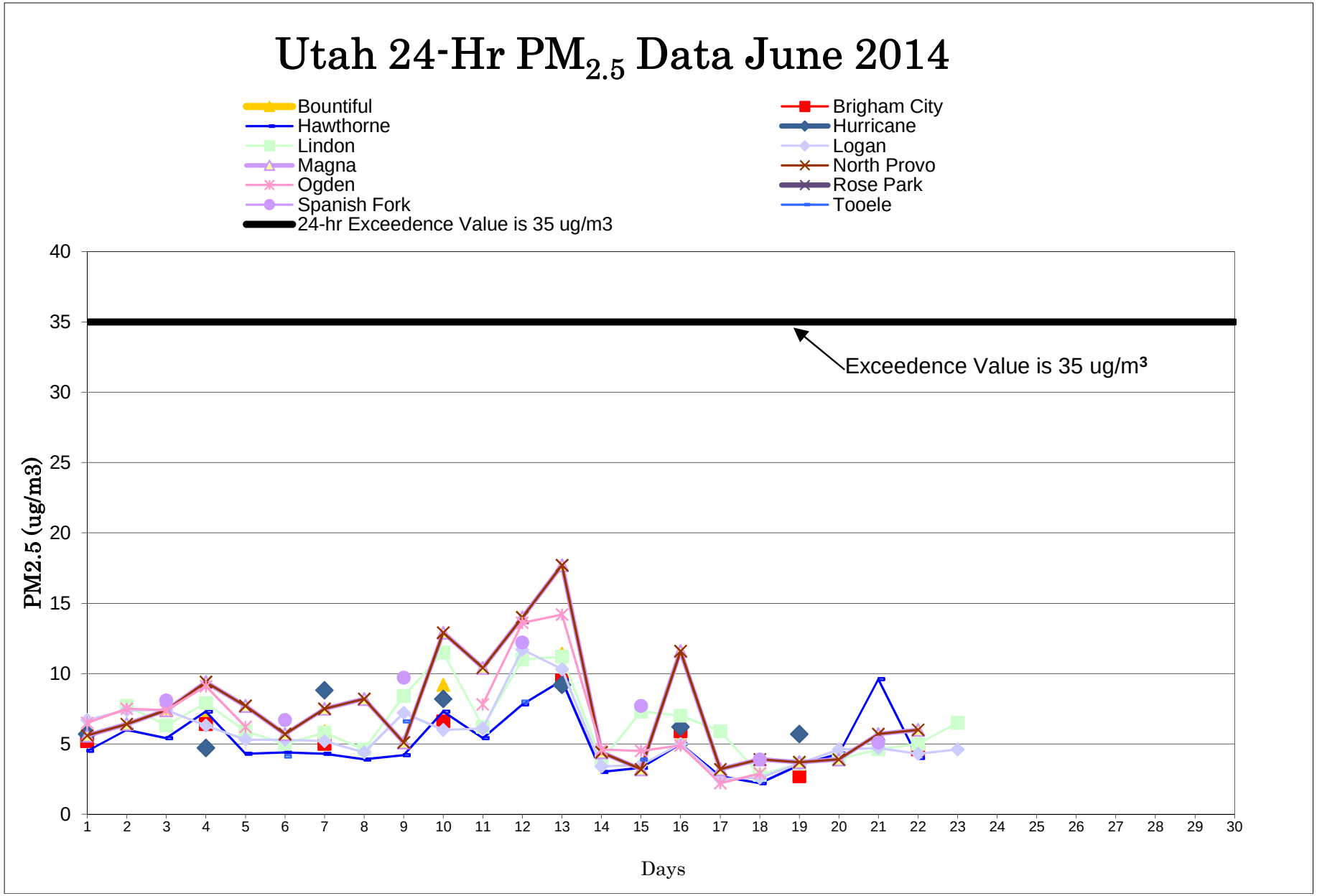
[1]Miscellaneous inspections include, e.g., surveillance, level I inspections, VOC inspections, complaints, on-site training, dust patrol, smoke patrol, open burning, etc.

Utah 24-Hr PM2.5 Data May 2014

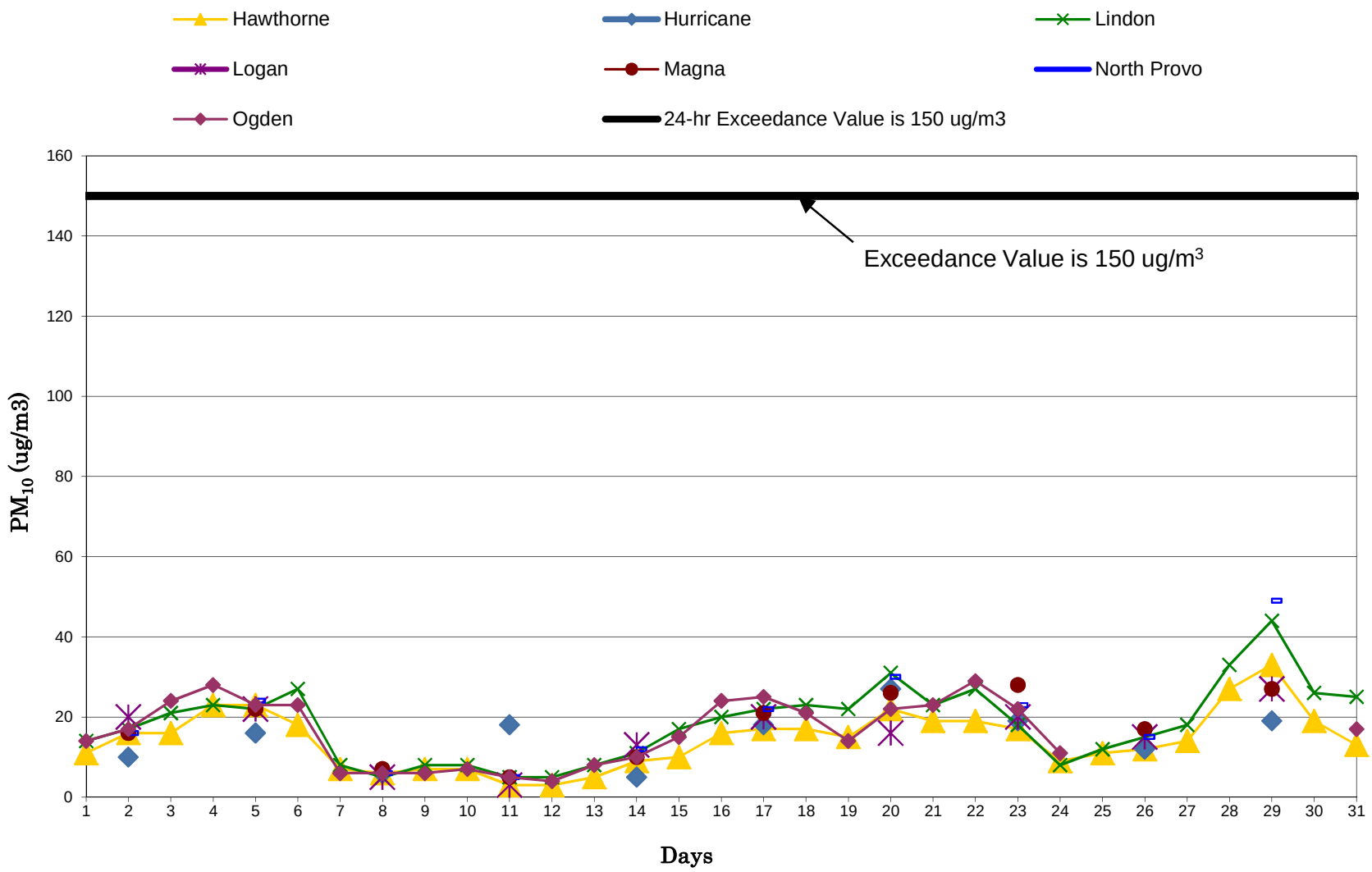


Utah Division of Air Quality

Utah 24-Hr $PM_{2.5}$ Data June 2014

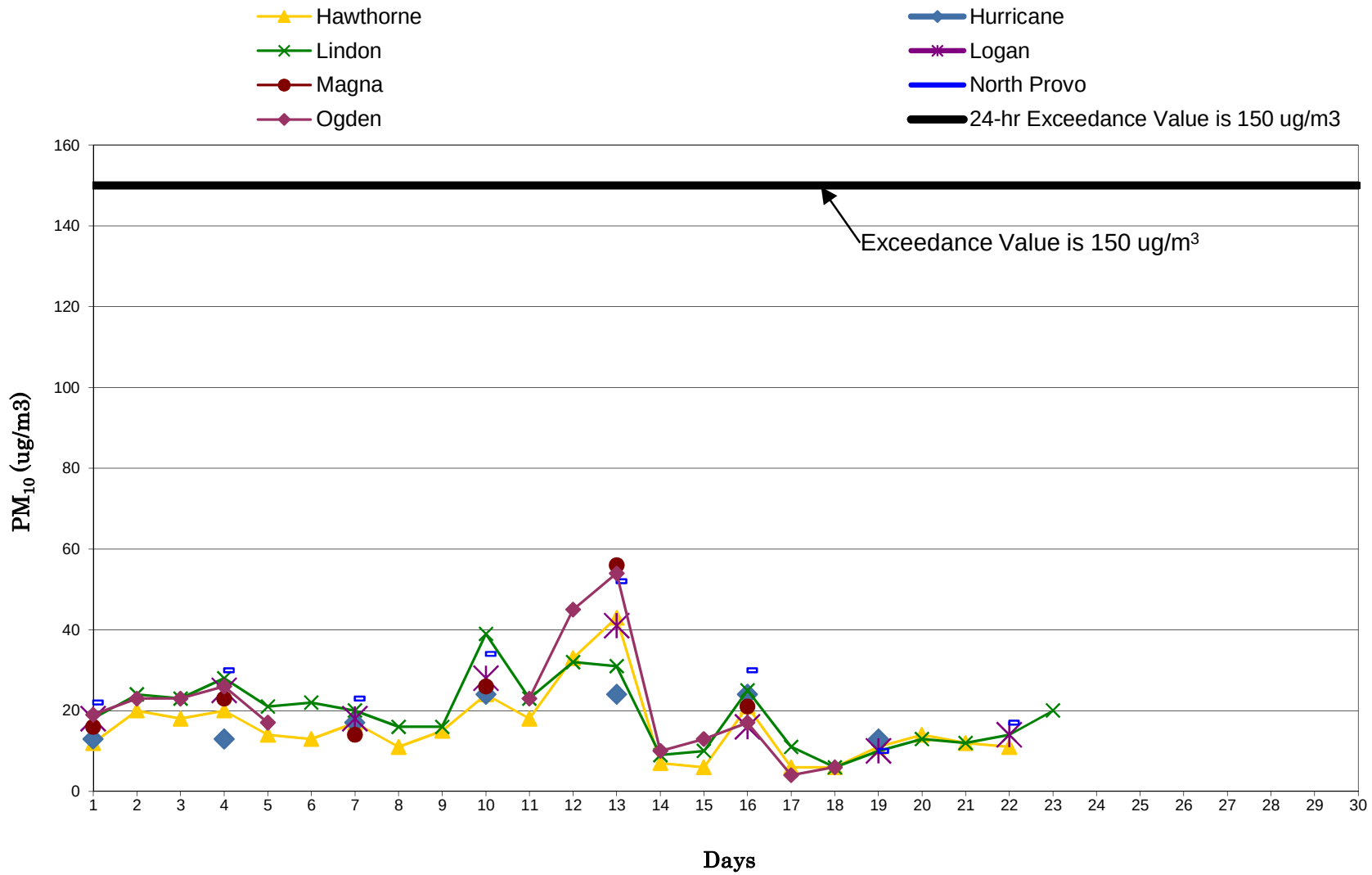


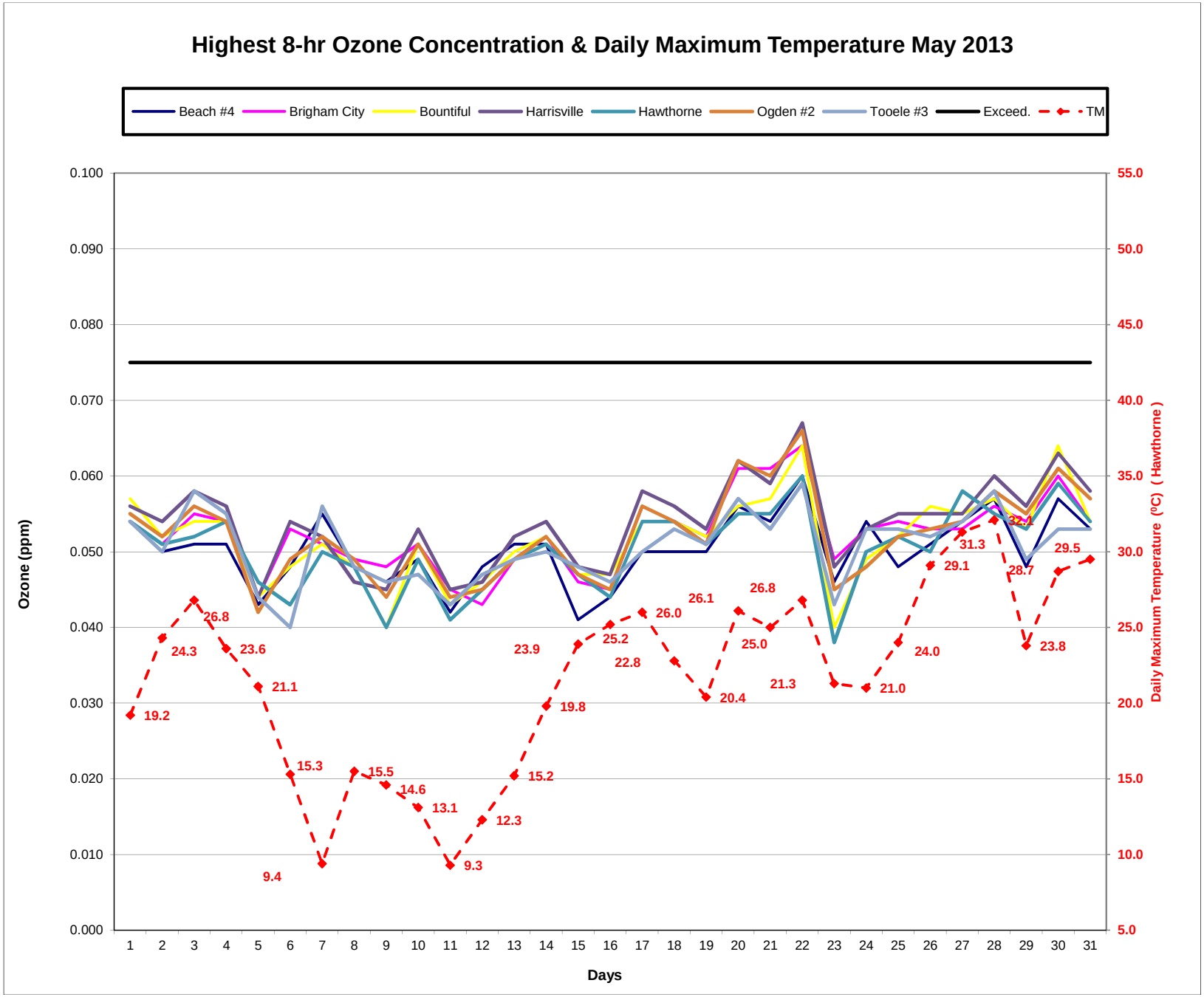
Utah 24-hr PM_{10} Data May 2014



Utah Division of Air Quality

Utah 24-hr PM_{10} Data June 2014




Highest 8-hr Ozone Concentration & Daily Maximum Temperature May 2013
Beach #4
Brigham City
Bountiful
Harrisville
Hawthorne
Ogden #2
Tooele #3
Exceed.
TM
Ozone (ppm)
Daily Maximum Temperature (ºC) (Hawthorne)
Days
0.100
0.090
0.080
0.070
0.060
0.050
0.040
0.030
0.020
0.010
0.000
55.0
50.0
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
19.2
24.3
26.8
23.6
21.1
9.4
15.3
15.5
14.6
13.1
9.3
12.3
15.2
23.9
19.8
25.2
22.8
26.0
26.1
20.4
25.0
26.8
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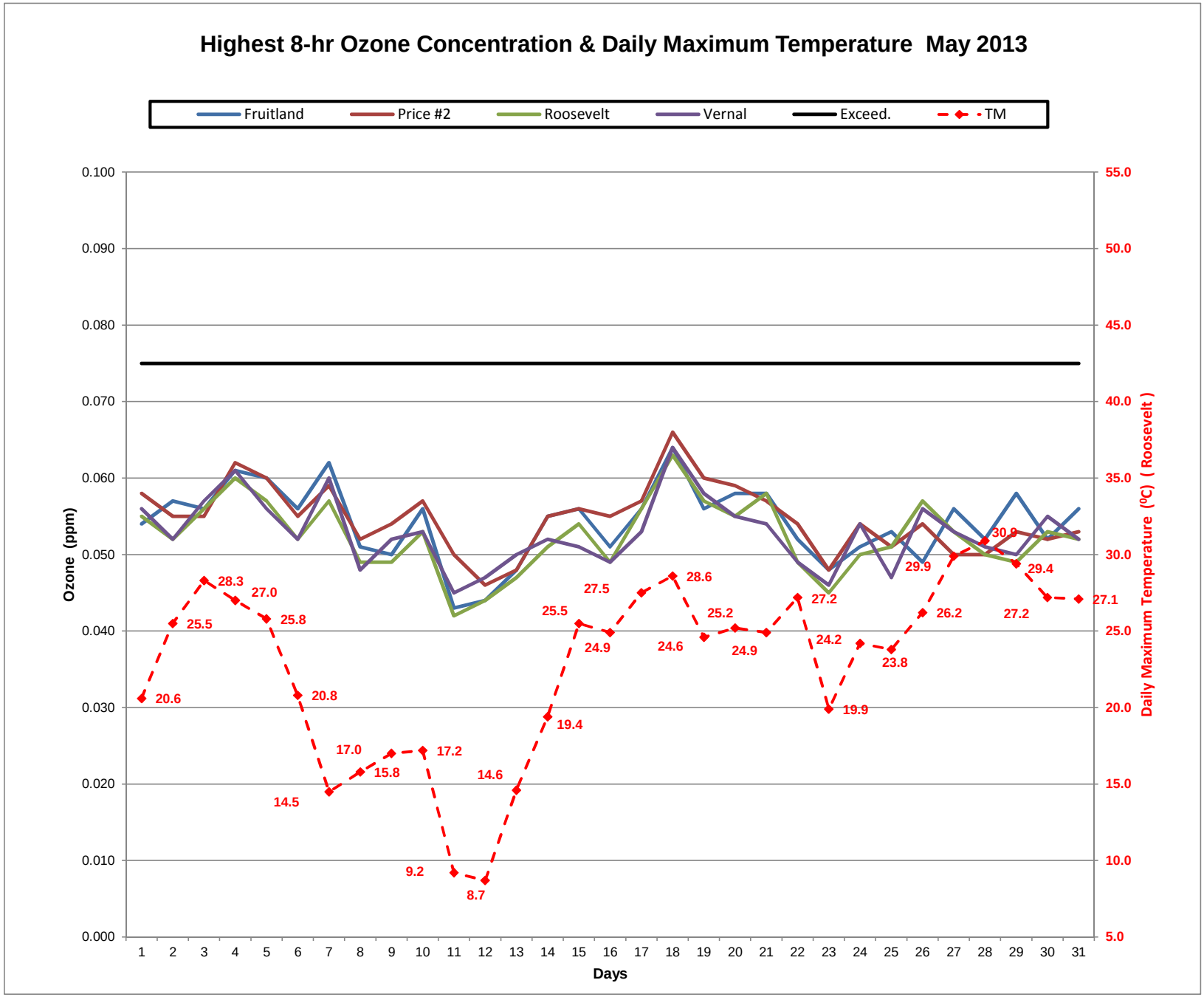
21.0
24.0
29.1
31.3
32.1
28.7
23.8
29.5


Highest 8-hr Ozone Concentration & Daily Maximum Temperature May 2013
Fruitland
Price #2
Roosevelt
Vernal
Exceed.
TM
Ozone (ppm)
Daily Maximum Temperature (ºC) (Roosevelt)
Days
0.100
0.090
0.080
0.070
0.060
0.050
0.040
0.030
0.020
0.010
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55.0
50.0
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14.5
17.0
15.8
17.2
9.2
8.7
14.6
19.4
25.5
27.5
24.9
24.6
28.6
25.2
24.9
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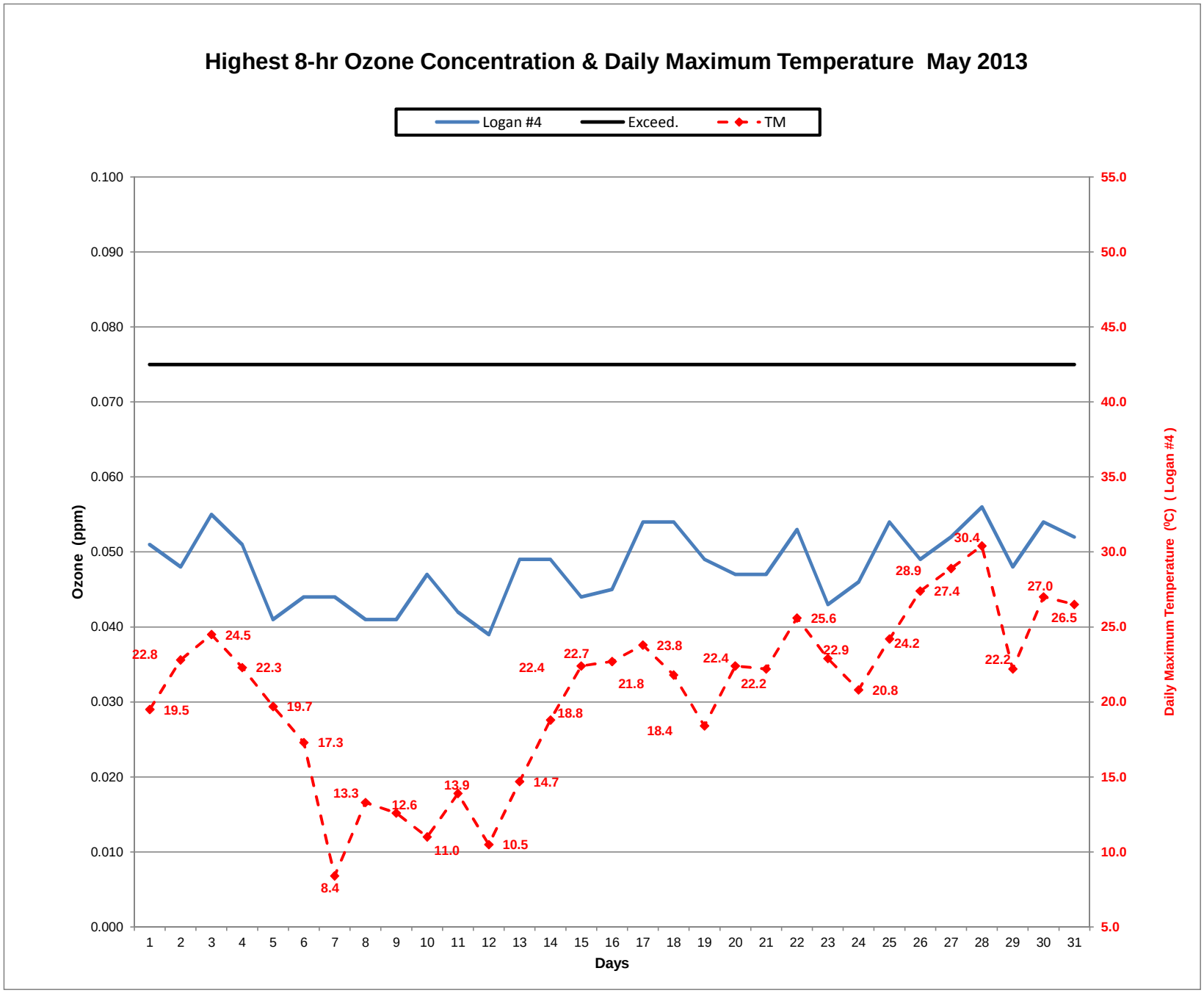
30.9
27.2
29.4
27.1


Highest 8-hr Ozone Concentration & Daily Maximum Temperature May 2013
Logan #4
Exceed.
TM
Ozone (ppm)
Daily Maximum Temperature (ºC) (Logan #4)
Days
0.100
0.090
0.080
0.070
0.060
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0.040
0.030
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0.010
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55.0
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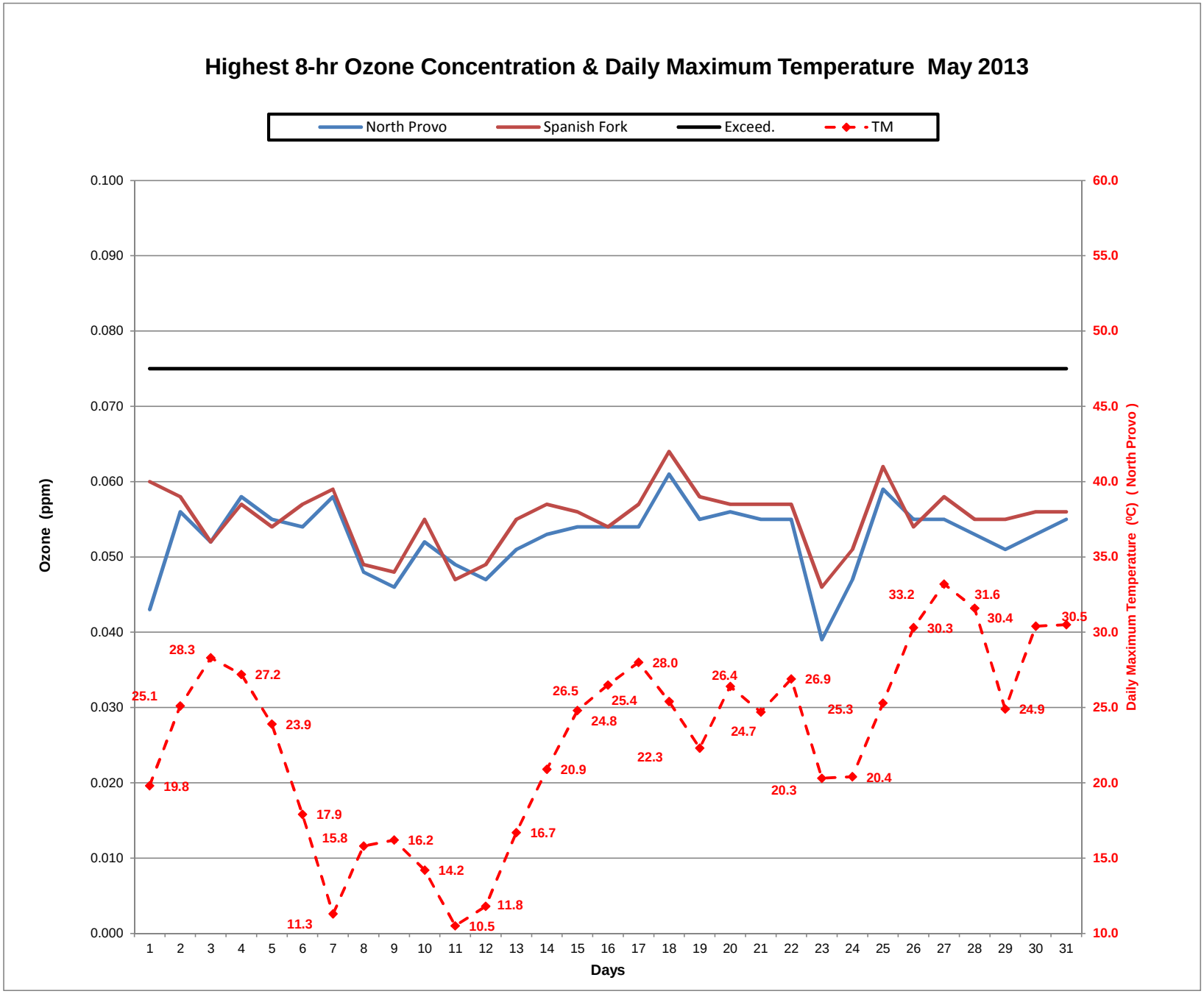
26.5


Highest 8-hr Ozone Concentration & Daily Maximum Temperature May 2013
North Provo
Spanish Fork
Exceed.
TM
Ozone (ppm)
Daily Maximum Temperature (ºC) (North Provo)
Days
0.100
0.090
0.080
0.070
0.060
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0.040
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0.020
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0.000
60.0
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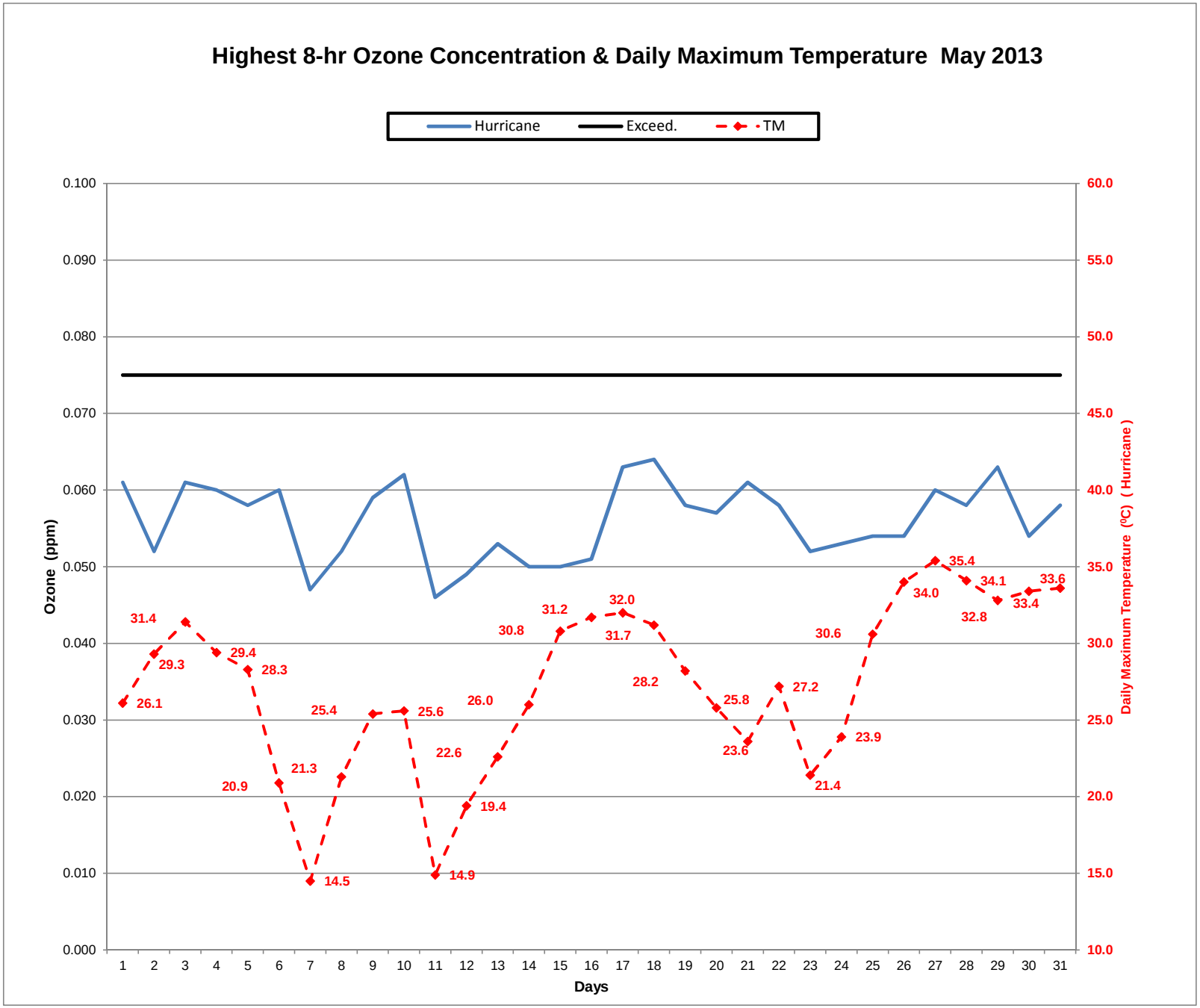
Highest 8-hr Ozone Concentration & Daily Maximum Temperature May 2013
Hurricane
Exceed.
TM
Ozone (ppm)
Daily Maximum Temperature (ºC) (Hurricane)
Days
0.100
0.090
0.080
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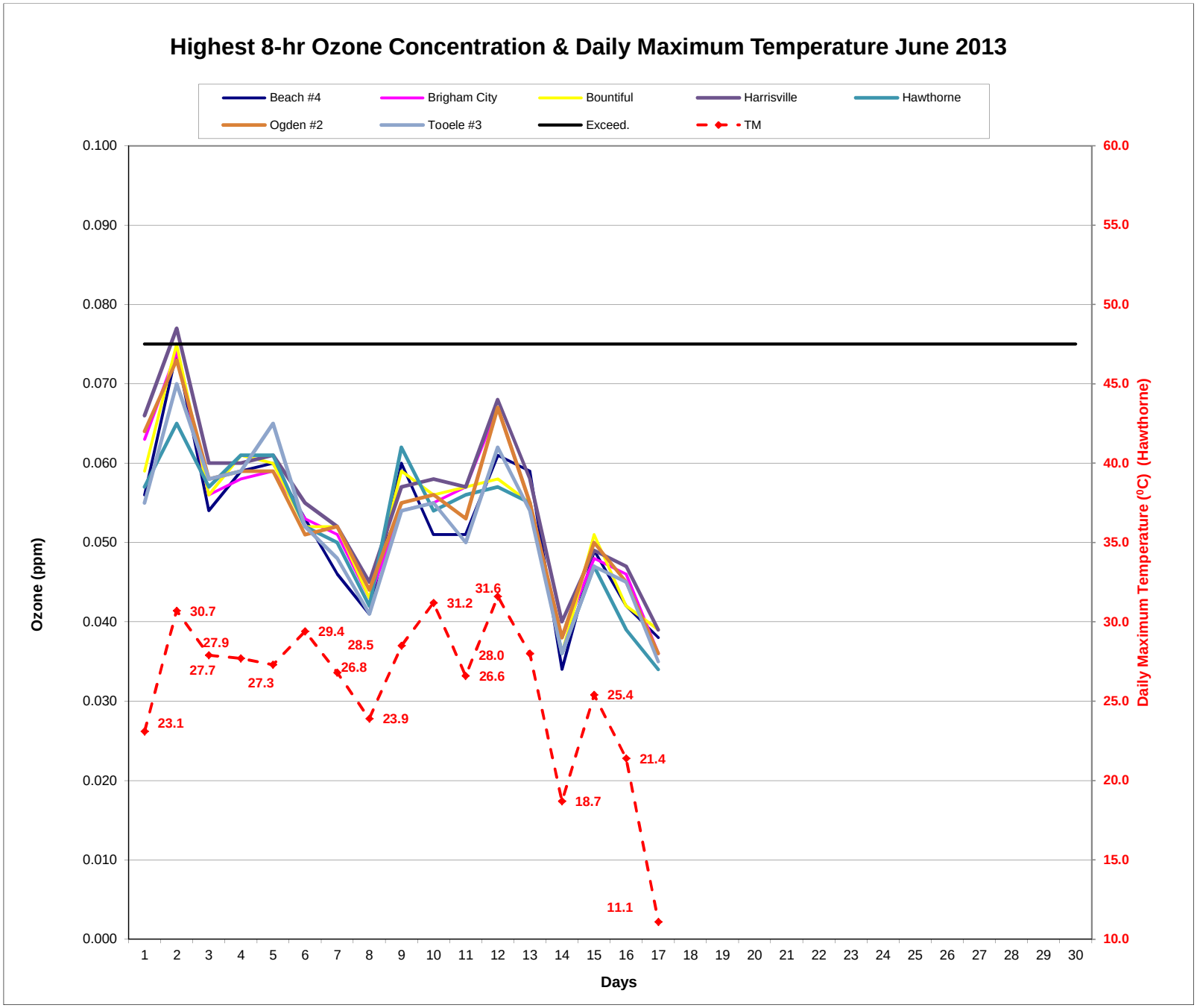
Highest 8-hr Ozone Concentration & Daily Maximum Temperature June 2013
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Brigham City
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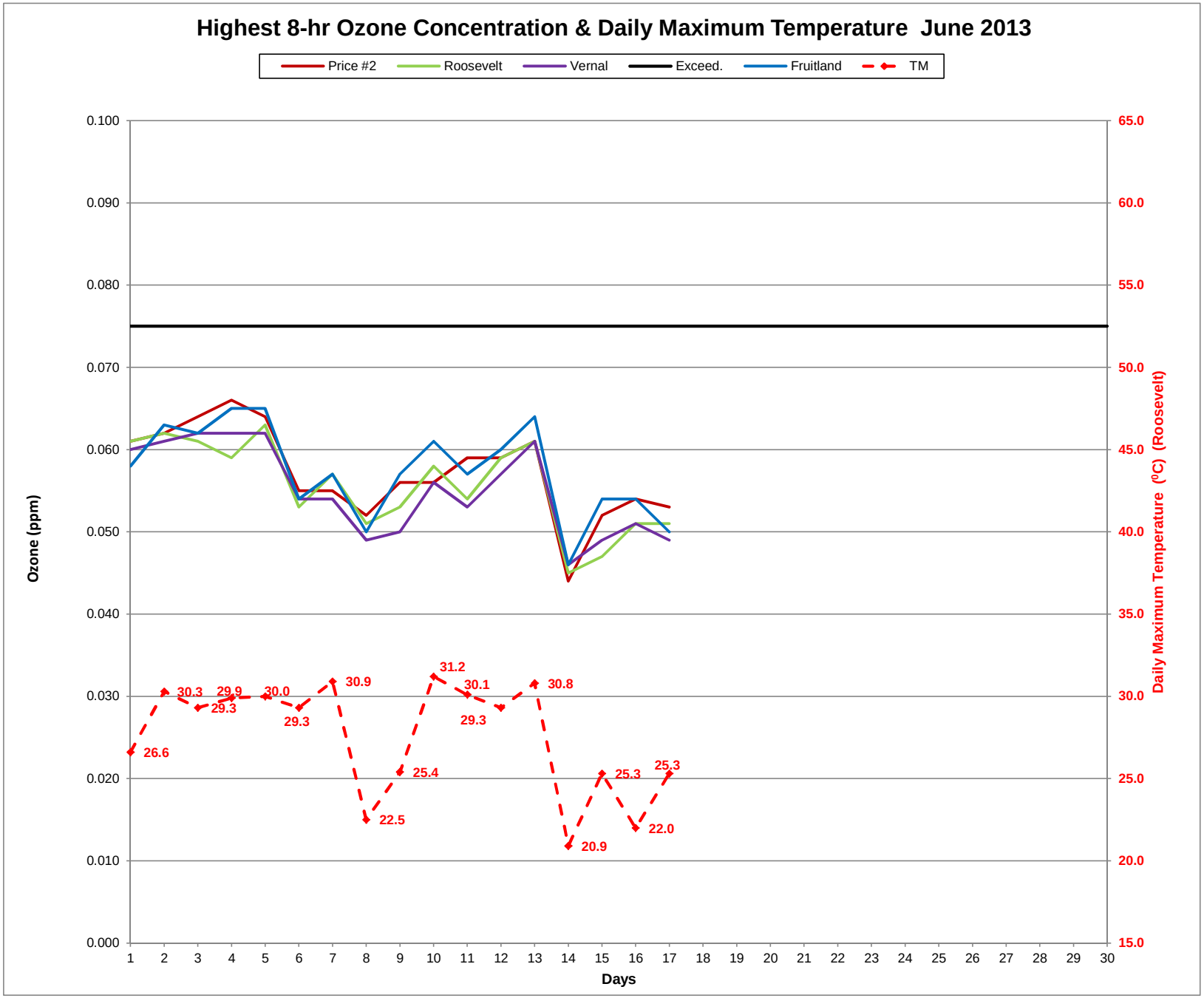
Highest 8-hr Ozone Concentration & Daily Maximum Temperature June 2013
Price #2
Roosevelt
Vernal
Exceed.
Fruitland
TM
Ozone (ppm)
Daily Maximum Temperature (ºC) (Roosevelt)
Days
0.100
0.090
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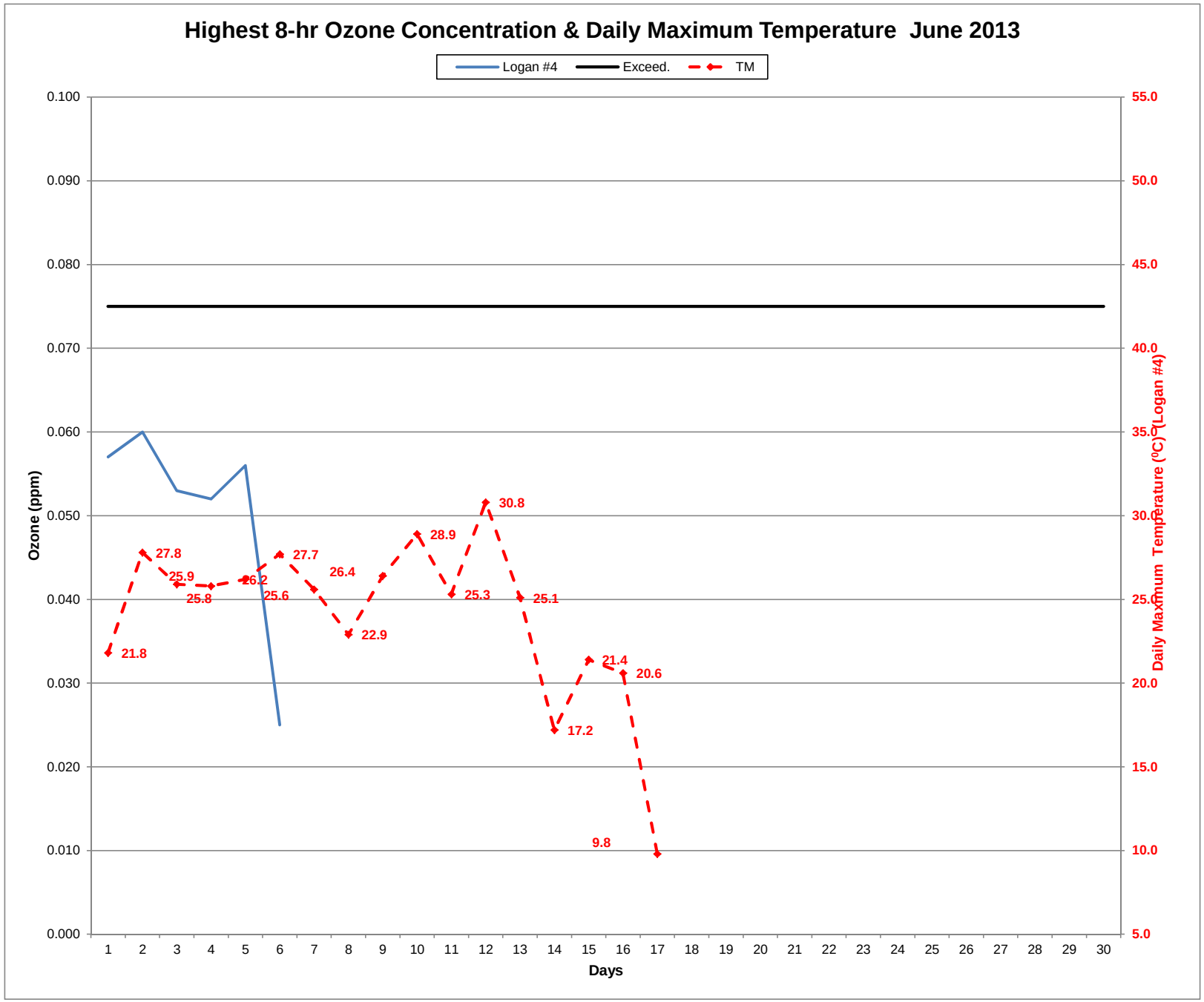
Highest 8-hr Ozone Concentration & Daily Maximum Temperature June 2013
Logan #4
Exceed.
TM
Ozone (ppm)
Daily Maximum Temperature (°C) (Logan #4)
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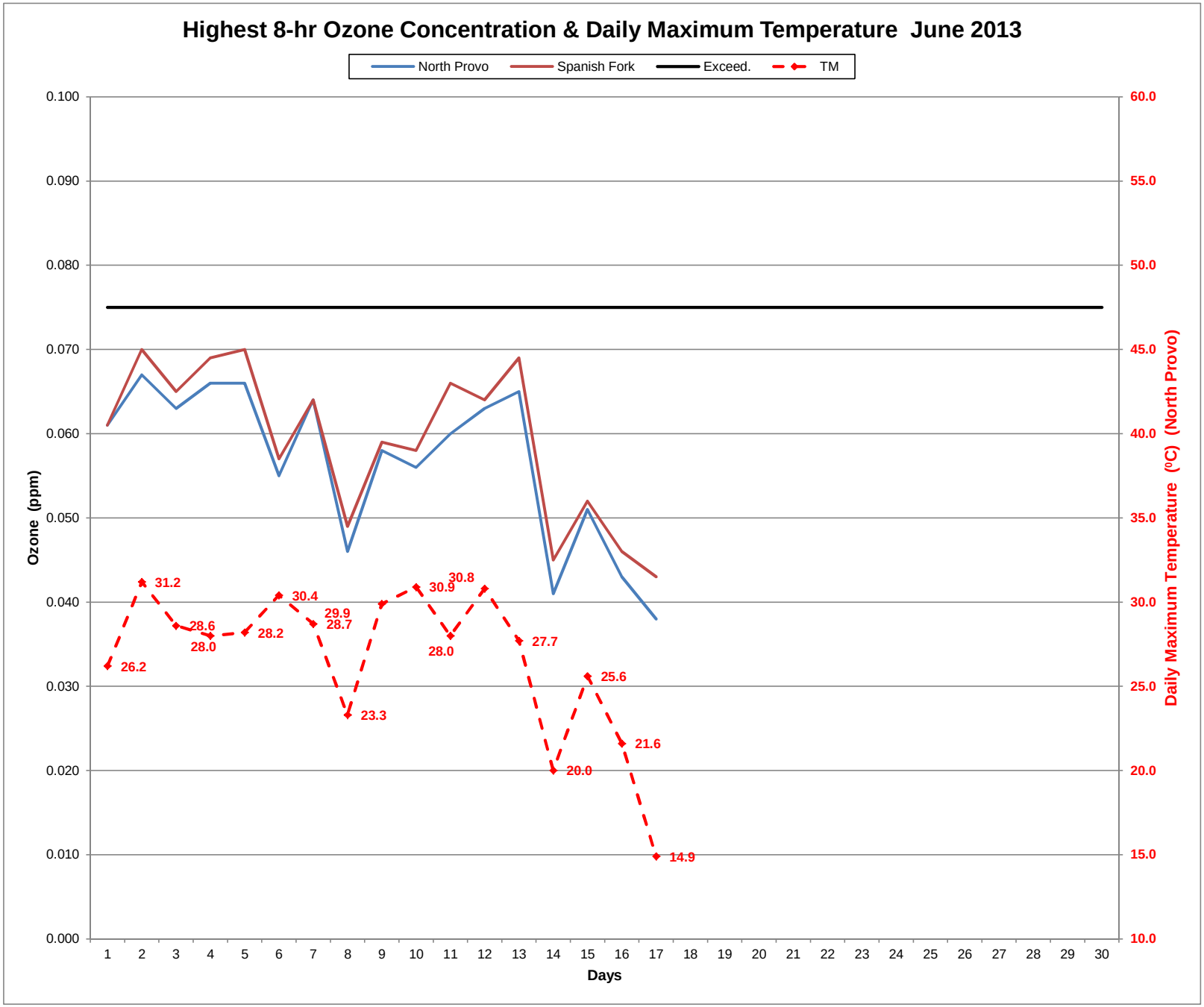
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Ozone (ppm)
Daily Maximum Temperature (°C) (North Provo)
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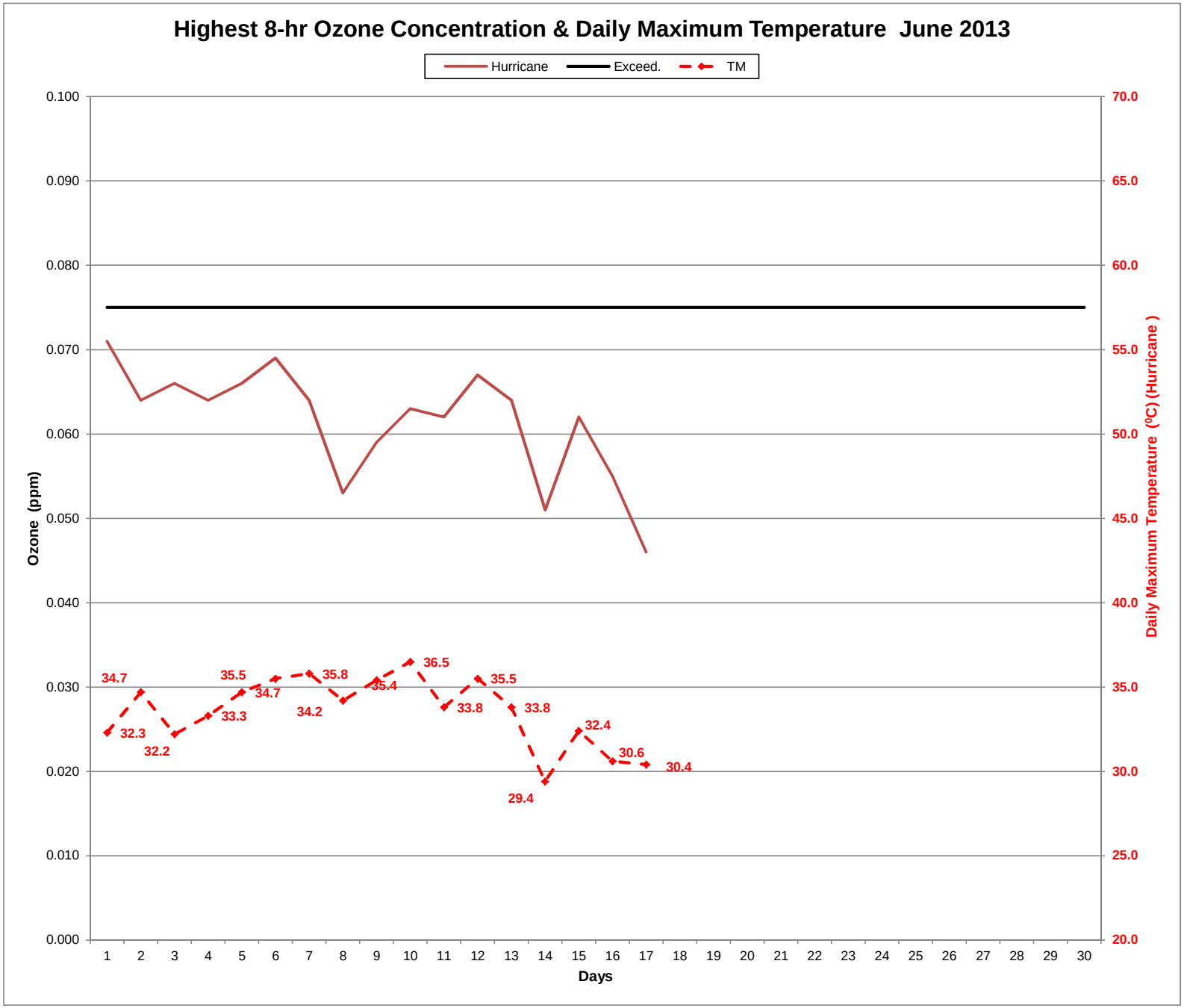
Highest 8-hr Ozone Concentration & Daily Maximum Temperature June 2013
Hurricane
Exceed.
TM
Ozone (ppm)
Daily Maximum Temperature (°C) (Hurricane)
Days
0.100
0.090
0.080
0.070
0.060
0.050
0.040
0.030
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0.010
0.000
70.0
65.0
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