TOYOTA

TO: DEALER PRINCIPALS, SERVICE MANAGERS AND PARTS MANAGERS

DATE: 2013

RE: Information Packet for Corrosion-Resistant Compound ("CRC") Campaigns

TOYOTA CORROSION-RESISTANT COMPOUND CAMPAIGNS

MARYLAND DEALER INFORMATION PACKET

Toyota has been offering Corrosion-Resistant Compound ("CRC") campaigns for different model year ("MY") Toyota vehicles registered in certain cold climate states with high road salt use. Toyota Motor Sales, U.S.A., Inc. ("TMS") has developed this Dealer Information Packet to apply across all current and any potential future CRC campaigns.

IMPORTANT

For Tacoma LSC 90D, Tundra B0D, Sequoia C0D and Tundra BXD -- which are collectively referred to in this Packet as "the previous CRC campaigns" -- TMS provided your dealership with a separate packet for each campaign.

This Packet supersedes those separate packets and should be used for:

- ***Any of the previous CRC campaigns that are still ongoing and***
- ***Any potential future CRC campaign.***

You will still receive separate Technical Instructions for any potential future CRC campaign before launch.

For the CRC campaigns, you are applying two CRCs --

- 712 AM (interior frame surfaces)
- Noxudol 300 S (exterior frame surfaces)

-- using the two Vaupel HSDR 3300 spray guns issued to your dealership for the previous CRC campaigns.

Applying the CRC materials and using the Vaupel HSDR 3300 spray gun raises legal compliance obligations pertaining to ***air emissions, fire safety approval and recordkeeping.*** This Packet explains these obligations and recommends steps to assure your dealership's continued compliance with them.[1] This Packet consists of two parts:

- **Part One – General Guide for Compliance**: Part One identifies the general compliance steps all dealerships should take irrespective of location.
- **Part Two: State Compliance Supplement**: This Supplement identifies additional compliance steps for your dealership's particular state and also includes recordkeeping forms and documents.

Please review this CRC Campaigns Dealer Information Packet carefully. If, after reviewing this Packet, you have any questions or concerns, please go to the C.L.E.A.N. Dealer website (http://cleandealer.com) or call the EH&S Hotline (877-572-4347).

ASSISTANCE BY KPA: Due to the complexity of the CRC campaigns, TMS engaged KPA to provide additional assistance directly to dealerships conducting CRC campaigns. We plan to continue this engagement for KPA's assistance as your dealership makes the transition to using this updated CRC Campaigns Dealer Information Packet. After a reasonable transition period, KPA's assistance will be available to your dealership only on an as needed basis as approved by your regional representative; additional information will be provided to you at that time.

[1] This Packet is not intended to cover other air, waste management, hazardous material, water, or other environmental laws and regulations that might apply to non-CRC campaign operations at your dealership. We assume that you already comply with other environmental, health and safety requirements.

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TOYOTA CORROSION-RESISTANT COMPOUND CAMPAIGNS
DEALER INFORMATION PACKET

PART ONE – GENERAL GUIDE FOR COMPLIANCE

Applying the CRC materials with a Vaupel HSDR 3300 spray gun produces Volatile Organic Compounds ("VOCs") and Particulate Matter ("PM") air emissions subject to federal and state regulations. Generally, these regulations allow emissions up to a certain level and require an air permit to exceed that level. The CRC campaigns do not require a federal air permit. However, air emissions regulations differ in each state; as a result, the CRC campaigns require an air permit in some states. A few local jurisdictions also require an air permit for the CRC campaigns.

Additionally, the CRC materials are Class III combustible liquids subject to state and/or local fire codes. These codes require approval to conduct the CRC campaigns from each dealership's state and/or local fire code enforcement official.

For the previous CRC campaigns, TMS worked with participating dealerships to obtain:

- An air permit and/or any other approvals, if necessary, to assure compliance with the air emissions regulations; and
- Approval from the appropriate fire code enforcement official.

If your dealership conducted the previous CRC campaigns, then you should be able to conduct any potential future CRC campaign as long as you continue to comply with the legal requirements explained in this Packet.

IMPORTANT:

If your dealership did not conduct the previous CRC campaigns or now plans to change its location for conducting CRC campaigns, then:

- **This Compliance Guide is not applicable; and**
- **Your dealership may not conduct any CRC campaigns until you contact the EH&S Hotline (877-572-4347) to discuss your particular situation and obtain the necessary air regulatory and fire code approvals.**

If your dealership has been conducting previous CRC campaigns, but has decided to discontinue its participation, you must contact your regional representative before doing so and also inform Headquarters.

Step One — Before You Begin Any CRC Campaign, Confirm That Your Dealership Will Satisfy All Criteria Below.

1. **CONDUCT IN SAME SPRAY SPACE AS THE PREVIOUS CRC CAMPAIGNS.**

   a. The spray space used for the previous CRC campaigns already should have been approved by your state and/or local fire code enforcement official.

   b. You must conduct any CRC Campaign in this same approved spray space.

   c. If your dealership is not able to do so, then you will need a new approval **before** you begin the new CRC campaign.

2. **FOLLOW TECHNICAL INSTRUCTIONS.**

   a. Each CRC campaign has its own Technical Instructions.

   b. You must review the Technical Instructions for the CRC campaign with all employees involved in the campaign.

3. **COMPLY WITH AIR PERMITTING REQUIREMENTS.**

   a. Your dealership currently should:

      i. Not hold an air permit for operations other than the CRC campaigns (if so, then that permit might need to be amended before conducting the CRC campaigns.);

      ii. Not operate a very large onsite or offsite body shop and/or otherwise engage in significant painting, coating or other spraying operations (if so, then your dealership might trigger air permitting due to its non-CRC campaign activities.); and

      iii. For the CRC campaigns either:

         (1) Hold the necessary state and/or local air permit, where required, or

         (2) Continue to satisfy air permit exemption requirements.

         Refer to Part One, Appendix B and Part Two for details.

4. **COMPLY WITH OTHER AIR EMISSIONS OBLIGATIONS.**

   a. Continue to **process no more than 1 vehicle every 2 hours, except New Jersey dealerships are subject to a more stringent vehicle processing limit**. Refer to Part One, Appendix A & B and Part Two for details.

   b. Continue to comply with air recordkeeping and other special air regulatory obligations, such as training and housekeeping, where applicable. Refer to Part Two for details.

Note on Recordkeeping Forms: ***Use the recordkeeping forms provided in Part Two for all CRC campaigns. No longer use the forms provided in the packets for the previous CRC campaigns, but keep previously completed forms on file until 5 years after your dealership ceases its involvement in CRC campaigns.***

5. **COMPLY WITH FIRE AND OTHER LOCAL CODES.**

a. Continue to comply with the approval issued by your state and/or local fire code enforcement official for the previous CRC campaigns. If this approval established any special restrictions,

i. Make sure that these restrictions will not prevent you from conducting the CRC campaign, and

ii. Continue to comply with them, including any renewal requirements.

b. Continue to do all of the following when applying CRCs:

i. Maintain adequate ventilation in the spray space and surrounding area;

ii. Have no open flames, spark-producing equipment, or drying, curing, or fusion apparatuses within 20 feet of the spray space;

iii. Make fire extinguishers rated "B," "AB," or "ABC" available within 30 feet of the spray space; and

iv. Follow best management practices for handling and storage of the CRC materials including:

(1) Do not store more than 25 gallons of the CRC materials and any other regulated flammable or combustible materials in any one fire area; or

(2) If you store more than 25 gallons of regulated flammable or combustible liquid in any one fire area, then you must use a fire cabinet.

(a) A single fire cabinet may hold up to 120 gallons. Your dealership may only have up to three such fire cabinets in each fire area.

(b) If you store regulated flammable or combustible liquids at these levels (3 x 120 gals. = 360 gals.), you should confirm with your appropriate fire code enforcement official that such storage does not require an operational permit in your locality.

c. Continue to comply with any additional requirements imposed under fire, building, environmental, safety or zoning codes for your particular locality. Refer to Part Two for details.

Step Two **Begin Conducting The CRC Campaign In Compliance With The Vehicle Processing Limit And The Other Requirements Discussed Above and in Part Two.**

Note on CRC Campaign Wastes: ***When conducted in accordance with the Technical Instructions, the CRC campaigns do not generate hazardous wastes. In conducting any CRC campaign, your dealership should adhere to its own best practices for general, non-hazardous waste handling.***

Thank you for participating in the CRC campaigns.

TOYOTA MOTOR SALES, U.S.A., INC.

CORROSION-RESISTANT COMPOUND CAMPAIGNS
DEALER INFORMATION PACKET

PART ONE – GENERAL GUIDE FOR COMPLIANCE
APPENDIX A VEHICLE PROCESSING GUIDANCE

VEHICLE PROCESSING LIMIT FOR CRC CAMPAIGNS: **No more than 1 vehicle every 2 hours.**

New Jersey Exception: New Jersey dealerships are subject to a more stringent vehicle processing limit. (Refer to New Jersey Part Two for details.)

For certain CRC campaigns, your dealership may be able to process a vehicle more quickly, but nevertheless, to assure compliance, you should adhere to this processing limit for all CRC campaigns and all vehicles.

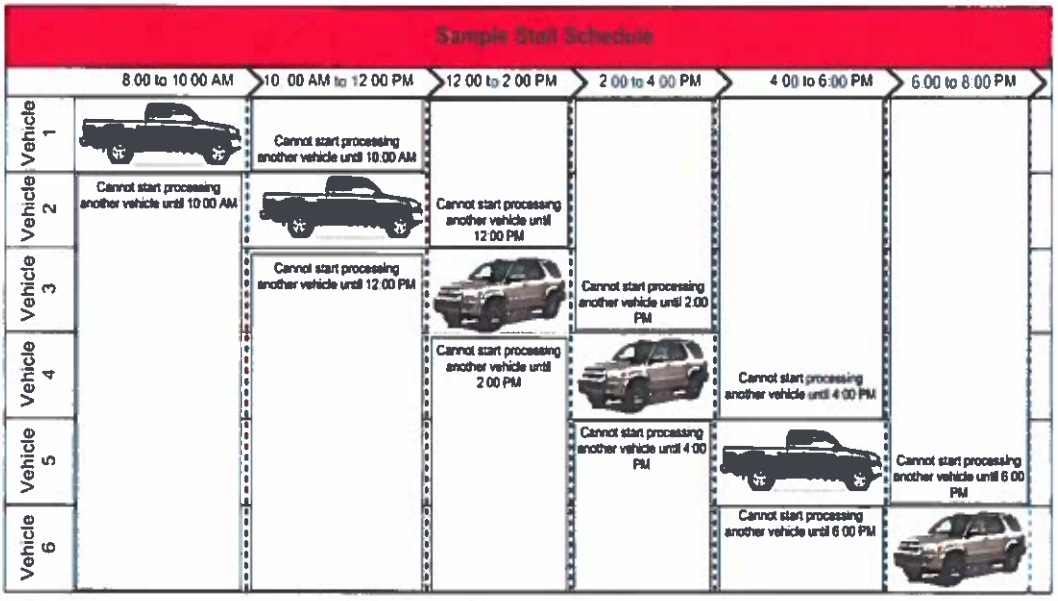
- "Processing" means applying the CRCs to the vehicle with the Vaupel HSDR 3300 spray gun; it does not include vehicle preparation activities.
- The vehicle processing limit means that once you begin processing a vehicle, you may not begin processing another vehicle until the 2 hours have passed.

Example #1

- You begin applying the CRCs to Vehicle A at 10:00 a.m. in the spray space.
- In another service bay, you begin preparing Vehicle B for processing.
- You complete processing the Vehicle A at 11:30 a.m., and by that time, you also have completed your preparation of Vehicle B for processing.
- You may move Vehicle B to the spray space at 11:30 a.m., but you may NOT begin processing it until 2 hours after you began processing Vehicle A at 10 a.m., or in other words, not until 12:00 p.m.

Example #2:

- You begin applying the CRCs to Vehicle A at 10:00 a.m. in the spray space.
- In another service bay, you begin preparing Vehicle B for processing.
- You complete processing Vehicle A at 12:05 p.m., and by that time, you also have completed your preparation of Vehicle B for processing.
- You may move Vehicle B to the spray space and begin processing it immediately, given that more than 2 hours has passed since you began processing Vehicle A.



Note: This sample schedule is only an example and the order of models sprayed will vary by customer appointment.

Tundra Minimum Process Time Is 2 Hours

Sequoia Minimum Process Time Is 2 Hours

CORROSION-RESISTANT COMPOUND CAMPAIGNS
DEALER INFORMATION PACKET

PART ONE – GENERAL GUIDE FOR COMPLIANCE
APPENDIX B -- COMPLIANCE WITH STATE AND LOCAL AIR PERMITTING REQUIREMENTS

The table below summarizes the steps necessary for Toyota dealerships conducting CRC campaigns to comply with state and local laws related to air permitting. When using this table, please keep in mind the following:

- The "State Air Permitting" column indicates whether a dealership needs an air permit to conduct CRC campaigns, and if no air permit is required, identifies permit exemption requirements.

- The "Local Air Permitting" column indicates any local jurisdiction within a particular state that requires an air permit or other special approval to conduct the CRC campaigns.

IMPORTANT: Follow all criteria described in Part One of this Dealer Information Packet and any additional steps set forth below for your particular state. See Part Two for further details.

Glossary of Common Abbreviations Used In This Table

CRCs: Corrosion Resistant Compounds
gal/hr: Gallons per hour
gal/day: Gallons per day
gal/yr: Gallons per year
lbs/hr: Pounds per hour
lbs/day: Pounds per day
lbs/mo: Pounds per month
PM: Particulate Matter
PTE: Potential to Emit
tpy: Tons per year
vpd: Vehicles per day
VOCs: Volatile Organic Compounds

STATE AIR PERMITTING	LOCAL AIR PERMITTING
CONNECTICUT	
Remain exempt by not using more than 2,000 gallons of paints, solvents, coatings, sealants (including the CRCs) and other VOC-containing materials across your entire dealership in any rolling 12-month period. (See Part Two for a materials usage tracking and compliance log.)	No additional requirements.
DELAWARE	
Comply with the Self-Registration submitted by TMS for your dealership and approved by the Delaware Department of Natural Resources and Environmental Conservation on April 20, 2012 by not processing more than 12 vpd. If your dealership never worked with TMS to submit this Self-Registration, or has moved its location since April 20, 2012, please call the EH&S Hotline (877-572-4347) BEFORE conducting any CRC campaigns.	No additional requirements.

ILLINOIS	
Remain exempt by keeping coating usage across your entire dealership (including CRC materials) at not more than 5,000 gal/yr. (See Part Two for a materials usage tracking and compliance log.)	**Dealerships located in the City of Chicago and in Cook County**: Comply with the air permit issued to your dealership by either, depending upon your location, the City of Chicago Department of Environment or the Cook County Department of Environmental Control for the previous CRC campaigns. ⇒ This permit authorizes any potential future CRC campaign being conducted at the same dealership location. ⇒ If your dealership never obtained this permit, or has moved its location since obtaining it, please contact your please call the EH&S Hotline (877-572-4347) BEFORE conducting any CRC campaigns.
INDIANA	
Remain exempt by keeping total actual emissions across your entire dealership under the "permit by rule" exemption levels of 20 tpy for VOCs and 20 tpy for PM.	**Dealerships located in Evansville**: Comply with the Certificate of Operation already issued by the Evansville Environmental Protection Agency to your dealership for the previous CRC campaigns. ⇒ This Certificate authorizes any potential future CRC campaign being conducted at the same dealership location. ⇒ If your dealership never obtained this Certificate, or has moved its location since obtaining it, please call the EH&S Hotline (877-572-4347) BEFORE conducting any CRC campaigns.
KENTUCKY	
Remain exempt by keeping PTE across your entire dealership below the state permitting thresholds of 10 tpy for VOCs and 10 tpy for PM.	**Dealerships located in Jefferson County**: Comply with the air permit already issued by the Louisville Metropolitan Air Pollution Control District to your dealership for the previous CRC campaigns by (i) Processing no more than 12 vehicles per day for any CRC campaign; and (ii) Performing monthly inspections of the exterior to the building in which you conduct the CRC operations to ensure no visible emissions are visable. ⇒ This permit authorizes any potential future CRC campaign being conducted at the same dealership location. ⇒ If your dealership never obtained this permit, or has moved its location since obtaining it, please call the EH&S Hotline (877-572-4347) BEFORE conducting any CRC campaigns.

MAINE	
Remain exempt by keeping total actual emissions across your entire dealership under the "total facility general process source" thresholds of 100 lbs/day and 10 lbs/hr for VOCs and PM. You can do so by limiting your operations as follows: On any particular day when you are actively engaged in applying CRCs: ⇒ Do not use spray guns in any non-CRC operations to apply VOC-containing materials; and ⇒ Do not use more than 12 gal/day or 1 gal/hr of VOC-containing materials (including coatings, paints and solvents) in your non-CRC operations.	No additional requirements.
MASSACHUSETTS	
Remain exempt by keeping records pursuant to the 310 CMR 7.20(2)(d) "Motor Vehicle Maintenance and Repair" exemption.	No additional requirements.
MARYLAND	
Remain exempt by keeping (1) the potential to emit of all CRC campaigns combined below 1 tpy for VOCs and 1 tpy for PM and (2) actual emissions of VOCs and PM from all CRC campaigns combined below the applicability threshold for any source-specific State or federal limitation or emissions standard, including any mass emissions rate limitation, pollutant concentration limitation, material formulation standard, equipment performance standard, or work practice standard. You should be able to do (1) & (2) by adhering to the vehicle processing limit of no more than 1 vehicle every 2 hours.	No additional requirements.

MICHIGAN	
Remain exempt by keeping total actual emissions of air contaminants from all CRC campaigns combined under the "Limited Emissions Exemption" level of 1,000 lbs/mo -- which you can do by adhering to the vehicle processing limit of no more than 1 vehicle every 2 hours.	No additional requirements.
MINNESOTA	
Remain exempt by keeping PTE across your entire dealership below the permitting thresholds of 100 tpy for VOCs and 25 tpy for PM.	No additional requirements.
NEW HAMPSHIRE	
Remain exempt by keeping total actual emissions across your entire dealership below the VOCs permitting threshold of 10 tpy, which you can do by limiting your operations as follows: ⇒ **If Your Dealership Does NOT Have Onsite Refueling Operations: Limit total usage across your entire dealership of all paints, solvents, coatings (including the CRC materials) and any other VOC-containing materials to below 2,500 gal/yr.** ⇒ **If Your Dealership Has Onsite Refueling Operations: Limit total usage across your entire dealership of (1) all paints, solvents, coatings (including the CRC materials) and any other VOC-containing materials to below 2,200 gal/yr, and (2) gasoline to below 100,000 gal/yr**	No additional requirements.

NEW JERSEY	
Comply with the Air Pollution Control Preconstruction Permit and Certificate to Operate issued by the New Jersey Department of Environmental Protection on September 2, 2011 by: ⇒ **Processing no more than one vehicle every 2.5 hours** (instead of every 2.0 hours); ⇒ Applying no more than 3 liters of Noxudol 300 S in any 2-hour period; and ⇒ Processing no more than 2,920 vehicles in any one spray space over any 12-month period. This permit authorizes any potential future CRC campaign being conducted at the same dealership location. If your dealership never obtained this permit, or has moved its location since obtaining it, please call the EH&S Hotline (877-572-4347) BEFORE conducting any CRC campaigns.	Dealerships located in Toms River: Comply with the more stringent local emissions limits for PM by: ⇒ **Processing no more than one vehicle every 3 hours** (instead of every 2.5 hours); and ⇒ Applying no more than 3 liters of Noxudol 300S in any 3-hour (instead of 2-hour) period.
NEW YORK	
Comply with the Air Facility Registration Certificate issued by the New York State Department of Environmental Conservation to your dealership at the time of the Tacoma LSC 90D by: ⇒ Keeping actual emissions across your entire dealership below the thresholds that trigger more extensive permitting: 50 tpy of PM and either 12.5 tpy (New York City Metropolitan Area) or 25 tpy (all other areas) of VOCs; and ⇒ Paying the annual fees required to keep this Registration up-to-date. This Registration authorizes any potential future CRC campaign being conducted at the same dealership location. If your dealership never obtained this Registration, or has moved its location since obtaining it, please call the EH&S Hotline (877-572-4347) BEFORE conducting any CRC campaigns.	Dealerships located in Rockland County: Comply with the operating certificate issued by the Rockland County Department of Health to your dealership for the previous CRC campaigns. ⇒ This certificate authorizes any potential future CRC campaigns being conducted at the same dealership location. ⇒ If your dealership never obtained this certificate, or has moved its location since obtaining it, please call the EH&S Hotline (877-572-4347) BEFORE conducting any CRC campaigns. Dealerships located in Westchester County: Obtain a "waiver" of permitting requirements from Westchester County prior to beginning each CRC campaign. BEFORE beginning any CRC campaign, please call the EH&S Hotline (877-572-4347) so that TMS can work with you to obtain this waiver. Dealerships located in New York City: Do not conduct any CRC campaigns, but arrange for your customers' vehicles to be processed by FAPS or another contractor approved by TMS.

OHIO	
Do either of the following: (1) Comply with the Permit to Install and Operate (PTIO) issued by Ohio EPA to your dealership at the time of the Tacoma LSC 90D by ⇒ Conducting all CRC campaigns at the specific address listed in the PTIO; ⇒ Processing no more than 1,398 vehicles per year for all CRC campaigns combined; ⇒ Complying with the recordkeeping and reporting requirements specified in the PTIO; and ⇒ Paying fees for the PTIO assessed by Ohio EPA. OR (2) Follow the instructions in Part Two for revoking this PTIO and staying exempt from air permitting.	Dealerships located in Butler, Clark, Clermont, Greene, Hamilton, Miami, Montgomery, or Warren County: Confirm that you submitted an Automobile Refinishing Operations Notification to the local Ohio EPA District Office or Local Air Agency responsible for your county prior to beginning the Sequoia C0D; if so, then you may rely on this Notification for any potential future CRC campaign being conducted at the same location. If your dealership never submitted this Notification, or has moved its location since doing so, please call the EH&S Hotline (877-572-4347) BEFORE conducting any CRC campaigns.
PENNSYLVANIA	
Remain exempt by ⇒ Keeping total actual emissions from each CRC campaign under the thresholds established by the relevant air regulatory agency in its permit exemption determination: ○ All Counties Other Than Allegheny and Philadelphia Counties: 0.11 ppv and 2.7 tpy per campaign for VOCs and 0.1 ppv and 0.12 tons per campaign for PM. ○ Allegheny County: 0.1 tpy per campaign for VOCs and 0.12 tpy per campaign for PM. ○ Philadelphia County: 0.11 lbs./vehicle and 1.0 tpy from all campaigns combined for VOCs and 0.1 ppv and 0.12 tpy per campaign for PM. ⇒ Complying with the following other conditions in the permit exemption determination: ○ Process no more than seven vehicles per day; and ○ Use the Vaupel HSDR 3300 spray guns in a manner consistent with the written notification provided to your dealership by TMS with the guns.	No additional requirements.

RHODE ISLAND	
Remain below permitting thresholds by keeping PTE for the CRC campaigns below the 100 lbs/day and 10 lbs/hr permitting thresholds for any single air contaminant and any combination of air contaminants – which you can do by adhering to the vehicle processing limit of no more than 1 vehicle every 2 hours.	No additional requirements.
TENNESSEE	
Remain exempt by relying on the "insignificant activity" Determination of Agreement issued by the Tennessee Air Pollution Control Board to your dealership for the Sequoia C0D. ⇒ This Determination exempts any potential future CRC campaign being conducted at the same dealership location. ⇒ If your dealership never obtained this Determination, or has moved its location since obtaining it, please call the EH&S Hotline (877-572-4347) BEFORE conducting any CRC campaigns.	No additional requirements.
VERMONT	
Remain exempt by: ⇒ Keeping actual emissions across your entire dealership below the 5 tpy for VOCs and 5 tpy for PM thresholds that would trigger an annual registration. ⇒ Maintaining on file the separate determination that no air permit is required, which TMS will obtain from the Vermont Department of Environmental Conservation for each CRC campaign and provide to your dealership.	No additional requirements.
VIRGINIA	
Remain exempt by keeping PTE across your entire dealership below the minor source permitting thresholds of 25 tpy for VOCs and 25 tpy for PM.	No additional requirements.

WEST VIRGINIA	
Remain exempt by: ⇒ Keeping PTE and actual emissions of VOCs and PM for all CRC campaigns below the hourly, daily and yearly thresholds that would trigger air permitting – 6 lbs/hr, 144 lbs/day and 10 tpy. ⇒ Maintaining on file the separate determination that no air permit is required, which TMS will obtain from the West Virginia Department of Air Quality (DAQ) for each CRC campaign and provide to your dealership. ⇒ Maintaining records required by DAQ's determination for each CRC campaign that describe the campaign and the CRCs and document the PTE and actual emissions. (See Part Two for an emissions tracking log and copies of the appropriate documents.)	No additional requirements.
WISCONSIN	
Remain exempt by keeping total actual emissions across your dealership under 10 tpy for VOCs and 10 tpy for PM.	No additional requirements.

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TOYOTA CORROSION-RESISTANT COMPOUND CAMPAIGNS
DEALER INFORMATION PACKET

PART TWO – STATE COMPLIANCE SUPPLEMENT FOR MARYLAND

This **Part Two – State Compliance Supplement for Maryland** provides further details on the two types of obligations that apply to CRC campaigns being conducted in Maryland:

(1) federal, state and local regulations governing Volatile Organic Compounds ("VOCs") and Particulate Matter ("PM") air emissions, and

(2) state and local fire, building, environmental, safety and zoning codes.

Your dealership should review this Part Two carefully and utilize it together with the **Part One – General Guide for Compliance**.

SUGGESTIONS FOR USING THIS PART TWO:

- **Carefully review and follow Step One and Step Two on the following pages.**
- **Identify and review the information for your dealership location in the table at Appendix A.**
- **Maintain records as provided for in Appendix B.**
- **Refer to Appendix C if additional information is needed for compliance with the federal, state and local requirements related to air emissions in Maryland.**

Step One — Before You Begin Any CRC Campaign, Your Dealership Located In Maryland Should Take The Additional Actions Below.

1. **CONFIRM AIR PERMIT EXEMPTION.**

   a. Confirm that you will conduct the CRC campaign in accordance with the following two criteria for Maryland's *de minimis* exemption from air permitting:

      i. Keep the potential to emit of all CRC campaigns combined below 1 tpy for VOCs and 1 tpy for PM.

      ii. Keep actual emissions of VOCs and PM from all CRC campaigns combined below the applicability threshold for any source-specific state or federal limitation or emissions standard, including any mass emissions rate limitation, pollutant concentration limitation, material formulation standard, equipment performance standard, or work practice standard.

   b. To do so, adhere to the vehicle processing limits (see Step Two below) and other requirements of this Dealer Information Packet. Refer to **Summary of Federal, State and Local Regulations Related to Air Emissions for Maryland** in **Appendix C** for details.

2. **CONFIRM LOCAL CODE COMPLIANCE.**

   a. Confirm compliance with the approval issued by your local fire code enforcement official in Maryland for previous CRC campaigns.

   b. Review **Summary Of Additional Fire And Other Local Requirements For Maryland** in **Appendix A** to determine whether your dealership is subject to additional local code compliance obligations, and if so confirm your compliance.

3. **CONDUCT TRAINING.**

   a. Provide training prior to beginning each CRC campaign to all relevant employees, even if those employees already have been involved in conducting other CRC campaigns.

   b. To train, you should review the CRC Campaigns Dealer Information Packet and the Technical Instructions for the particular campaign with the employees.

   c. You also should train any new employee prior to that employee becoming involved in conducting a CRC campaign.

   d. Document all training with the **Maryland Personnel Training Log** in **Appendix B**.

Step Two — Begin Conducting The CRC Campaign, But Do So In Compliance With Obligations That Apply In Maryland.

1. **COMPLY WITH HOURLY ALLOWABLE EMISSIONS RATE.** Keep PM emissions below the hourly allowable emissions rate by **processing no more than 1 vehicle every 2 hours**. Appendix A of Part One provides guidance on how to follow the limit. Document your adherence to this limit using the **CRC Campaign Daily Production Log** in **Appendix B**.

2. **FOLLOW STANDARD OPERATING PROCEDURES FOR CRC MATERIALS HANDLING, TRANSFER AND STORAGE.**

   a. Store the CRCs in nonabsorbent, non-leaking containers, and keep those containers closed at all times except when the container is being filled or emptied;

   b. Store absorbent applicators, such as cloth and paper that are moistened with the CRCs, in a closed, nonabsorbent, non-leaking container; and

   c. Minimize spills during the handling and transfer of the CRCs.

3. **COMPLY WITH AIR RECORDKEEPING.** Retain on file the following:

   a. Completed vehicle processing and training logs;

   b. The records required by Maryland's revised automotive refinishing regulation which became effective on July 1, 2013 (see **Appendix C, Part III.** for details); and

   c. The following documents provided in **Appendix B**:

      i. Process Overview for Toyota Motor Sales, U.S.A., Inc. CRC Campaigns.

      ii. The material safety data sheets for the two CRCs – Noxudol 300S and 712AM – being used for the CRC campaigns.

      iii. Vaupel HSDR 3300 Spray Equipment Manufacturer's Specifications.

      iv. CRC Campaigns Air Emissions Calculation Summary.

      v. The Maryland Department of the Environment's August 26, 2011 letter regarding applicability of the *de minimis* exemption from air permitting to the CRC campaigns.

IMPORTANT: Your dealership should no longer use the logs, procedures and documents provided in the dealer information packets for the previous CRC campaigns, but should maintain previously completed logs for an appropriate period of time. While your dealership can make its own compliance decisions, it is recommended that you retain the above documents and all completed logs until 5 years after your dealership ceases its involvement in CRC campaigns.

If you have any questions after reviewing this Part Two – State Compliance Supplement for Maryland, please go to the C.L.E.A.N. Dealer website (http://cleandealer.com) or call the EH&S Hotline (877-572-4347). Thank you for participating in the CRC campaigns.

TOYOTA MOTOR SALES, U.S.A., INC.

CORROSION-RESISTANT COMPOUND CAMPAIGNS
DEALER INFORMATION PACKET

PART TWO – STATE COMPLIANCE SUPPLEMENT FOR MARYLAND

APPENDIX A – SUMMARY OF ADDITIONAL FIRE AND OTHER LOCAL REQUIREMENTS FOR MARYLAND

In Maryland, no fire code approval was required at the state level, and therefore your dealership should have obtained an approval to conduct the CRC campaigns from your local fire code enforcement official. You should confirm that your dealership can conduct the CRC campaign in compliance with this approval.

In some jurisdictions in Maryland, additional requirements may apply to any potential new CRC campaign pursuant to local fire, building, environmental, safety and/or zoning codes. You should use this Summary as a guide to identify additional fire and other local code requirements potentially relevant to the CRC campaigns. For any such requirement identified, you should then determine whether the requirement applies to your dealership when conducting any potential CRC campaign, and if so confirm your compliance.

IMPORTANT: This Summary contains information gathered by TMS in 2010 at the time of the Tundra B0D and is being provided as part of this CRC Campaigns Dealer Information Packet to support your dealership's continued compliance with additional fire and other local code requirements. Subsequent to 2010, however, it is possible that your local jurisdiction has enacted new codes or revised existing codes in a manner that would add, modify or eliminate the potentially relevant requirements identified in this Summary. It is your dealership's responsibility to keep informed of any changes in local codes that may impact the CRC campaigns and to adjust your compliance actions as necessary.

Table 1: Code Summary for Maryland Locations

Location	Other Potentially Relevant Local Requirements
Allegany County - • **SHAFFER TOYOTA, BUICK, CHEVY**	Verify whether dealership is located below the Flood Protection Elevation, and if so, comply with any applicable requirements related to the use, storage and disposal of CRC campaign materials. Verify that dealership's current zoning and/or use permit (if applicable) allows the CRC campaign. **Contact** James A Squires Jr., Division Chief County Office Complex First Floor Suite 109 Cumberland, Maryland 21502-3401 (301) 777-5951
Annapolis - • **KOONS TOYOTA**	Verify whether dealership is located within a 100-year flood zone, and if so, comply with any applicable requirements related to the use, storage and disposal of CRC campaign materials. Verify that dealership's current zoning and/or use permit allows the CRC campaign. **Contact** Jon Arason, Director Planning and Zoning, 145 Gorman St. Annapolis, MD 21401 (410) 263-7961
Anne Arundel County - • **TOYOTA OF GLEN BURNIE**	Verify whether dealership is located within a 100-year flood zone, and if so, comply with any applicable requirements related to the use, storage and disposal of CRC campaign materials. Verify that dealership's current zoning and/or use permit allows the CRC campaign. **Contact** Larry R. Tom, Planning and Zoning Officer 2664 Riva Road Annapolis, Maryland 21401 (410) 222-7450

Baltimore (City) - • **RUSSELL TOYOTA-TCSC** • **DARCARS TOYOTA OF BALTIMORE**	Verify whether dealership is located below the Flood Protection Elevation, and if so, comply with any applicable requirements related to the use, storage and disposal of CRC campaign materials. Verify that dealership's current zoning and/or use permit allows the CRC campaign. **Contact** Thomas J. Stosur, Director Department of Planning 417 E. Fayette Street 8th Floor Baltimore, MD 21202 (410) 396-7526
Baltimore County - • **RUSSEL TOYOTA** • **JERRY'S TOYOTA** • **TIMONIUM TOYOTA** • **R&H TOYOTA**	Continue to comply with any additional signage requirements placed on your dealership by your local fire code enforcement official in connection with any prior CRC campaign. Verify that dealership's current zoning and/or use permit allows the CRC campaign. **Contact** Jeff Mayhew, Chief Community Planning Division Department of Permits & Development Management 111 W. Chesapeake Avenue, Room 213 Towson, MD 21204 (410) 887-3480
Bel Air - • **JONES TOYOTA**	See Hartford County for requirements.
Bethesda - • **JIM COLEMAN TOYOTA**	See Montgomery County for requirements.
Bowie - • **TOYOTA OF BOWIE**	See Prince George's County for requirements.

Calvert County - • **BAYSIDE TOYOTA**	Verify whether dealership is located below the Flood Protection Elevation, and if so, comply with any applicable requirements related to the use, storage and disposal of CRC campaign materials. Verify that dealership's current zoning and/or use permit allows the CRC campaign. **Contact** Calvert County Department of Planning and Zoning Address: County Services Plaza, 150 Main Street Prince Frederick, MD 20678 (410) 535-1600
Carroll County - • **KOONS WESTMINSTER TOYOTA**	Verify whether dealership is located within a 100-year flood zone, and if so, comply with any applicable requirements related to the use, storage and disposal of CRC campaign materials. Verify that dealership's current zoning and/or use permit allows the CRC campaign. **Contact** Gayle Fritz, Administrator Zoning Administration 225 North Center St. Westminster, MD 21157 (410) 386-2980
Charles County - • **TOYOTA OF WALDORF**	Verify whether dealership is located below the Flood Protection Elevation, and if so, comply with any applicable requirements related to the use, storage and disposal of CRC campaign materials. Verify that dealership's current zoning and/or use permit allows the CRC campaign. **Contact** Charles County Government Department of Planning and Growth Management 200 Baltimore Street La Plata, MD 20646 (301) 645-0618
Clarksville - • **ANTWERPEN'S TOYOTA VILLAGE**	See Howard County for requirements.

Frederick County - • **DARCARS TOYOTA OF FREDERICK**	Verify that dealership's current zoning and/or use permit allows the CRC campaign. **Contact** Gary Hessong, Director 30 N. Market St Frederick, MD 21701 (301) 600-2313
Gaithersburg - • **FITZGERALD'S LAKEFOREST**	Continue to post "No Smoking" signs at the service bays conducting any CRC campaign. Verify whether dealership is located within a Floodplain Zone, and if so, comply with any applicable requirements related to the use, storage and disposal of CRC campaign materials. Verify that dealership's current zoning and/or use permit allows the CRC campaign. **Contact** Planning and Code Administration 31 S Summit Ave Gaithersburg, MD 20877 (301) 258-6330
Glen Burnie - • **TOYOTA OF GLEN BURNIE**	See Anne Arundel County for requirements.
Harford County - • **JONES TOYOTA;** • **THOMPSON TOYOTA**	Verify whether dealership is located within a Floodplain Zone, and if so, comply with any applicable requirements related to the use, storage and disposal of CRC campaign materials. Verify that dealership's current zoning and/or use permit allows the CRC campaign. **Contact** Mary F. Chance, Director Community Development 319 South Main Street Bel Air, MD 21014 (410) 638-3389

Howard County - • **LAUREL TOYOTA**	Verify that dealership's current zoning and/or use permit allows the CRC campaign. **Contact** Marsha McLaughlin, Director Planning and Zoning 3430 Court House Drive Ellicott City, MD 21043
Landover Hills - • **TOYOTA OF BOWIE (TCSC)**	See Prince George's County for requirements.
Laurel - • **LAUREL TOYOTA**	See Howard County for requirements.
Lavale - • **SHAFFER TOYOTA, BUICK, CHEVY**	See Allegany County for requirements.
Lexington Park - • **TOYOTA OF SOUTH MARYLAND**	See St. Mary's County for requirements.
Marlow Heights - • **BELTWAY TOYOTA**	See Prince George's County for requirements.
Montgomery County - • **JIM COLEMAN TOYOTA;** • **DARCARS TOYOTA;** • **355 TOYOTA;** • ***FITZGERALD'S LAKEFOREST***	Continue to post "No Smoking" signs at the service bays conducting any CRC campaign. Verify that dealership's current zoning and/or use permit allows the CRC campaign. **Contact** Office of Zoning and Administrative Hearings Stella B. Werner Council Office Building 100 Maryland Avenue, Room 200 Rockville, Maryland 20850 (240) 777-6660
Owings Mills - • **R&H TOYOTA**	See Baltimore County for requirements.

Pocomoke City - • **MIDWAY TOYOTA**	Verify whether dealership is located below the Flood Protection Elevation, and if so, comply with any applicable requirements related to the use, storage and disposal of CRC campaign materials. Verify that dealership's current zoning and/or use permit allows the CRC campaign. **Contact** Harvey Davis, Housing/Zoning Coordinator Housing & Zoning Department 101 Clarke Ave./P. O. Box 29 Pocomoke City, Maryland 21851 (410) 957-1633
Prince Frederick - • **BAYSIDE TOYOTA**	See Calvert County for requirements.
Prince George's County - • **TOYOTA OF BOWIE;** • **TOYOTA OF BOWIE (TCSC);** • **BELTWAY TOYOTA**	Verify whether dealership is located below the Flood Protection Elevation, and if so, comply with any applicable requirements related to the use, storage and disposal of CRC campaign materials. Verify that dealership's current zoning and/or use permit allows the CRC campaign. **Contact** Stan D. Brown, Zoning Admin. County Administration Building 14741 Governor Oden Bowie Drive Upper Marlboro, MD 20772-3050 (301) 952-3186
Salisbury - • **POHANKA OF SALISBURY**	See Wicomico County for requirements.
Silver Spring - • **DARCARS TOYOTA**	See Montgomery County for requirements.

Rockville - • **355 TOYOTA**	Verify whether dealership is located below the Flood Protection Elevation, and if so, comply with any applicable requirements related to the use, storage and disposal of CRC campaign materials. Verify that dealership's current zoning and/or use permit allows the CRC campaign. **Contact** Department of Community Planning and Development Services Rockville City Hall, 2nd Floor 111 Maryland Avenue Rockville, MD 20850 (240) 314-8200
St. Mary's County • **TOYOTA OF SOUTH MARYLAND**	Verify whether dealership is located below the Flood Protection Elevation, and if so, comply with any applicable requirements related to the use, storage and disposal of CRC campaign materials. Verify that dealership's current zoning and/or use permit allows the CRC campaign. **Contact** Department of Land Use & Growth Management St. Mary's County Government 23115 Leonard Hall Dr. Leonardtown, MD 20650 (301) 475-4200
Talbot County - • **KOONS EASTON TOYOTA BALTIMORE**	Verify whether dealership is located within a Floodplain District, and if so, comply with any applicable requirements related to the use, storage and disposal of CRC campaign materials. Verify that dealership's current zoning and/or use permit allows the CRC campaign. **Contact** Tom Hamilton – Town Planner Town of Easton Planning & Zoning 14 S. Harrison Street P.O. Box 520 Easton, Maryland 21601 (410) 822-1943
Waldorf - • **TOYOTA OF WALDORF**	See Charles County for requirements.

Washington County - • **YOUNGER TOYOTA**	Verify whether dealership is located below the Flood Protection Elevation, and if so, comply with any applicable requirements related to the use, storage and disposal of CRC campaign materials. Verify that dealership's current zoning and/or use permit allows the CRC campaign. **Contact** Michael Thompson, Planning Director County Administrative Annex 80 West Baltimore Street Hagerstown, MD 21740 (240) 313-2430
Westminster - • **KOONS WESTMINSTER TOYOTA**	See Carroll County for requirements.
Wicomico County - • **POHANKA OF SALISBURY**	Verify whether dealership is located below the Flood Protection Elevation, and if so, comply with any applicable requirements related to the use, storage and disposal of CRC campaign materials. Verify that dealership's current zoning and/or use permit allows the CRC campaign. **Contact** Department of Planning, Zoning, and Community Development: Government Office Building Room 203 North Division Street and Route 50 P.O. Box 870 Salisbury, MD 21803-0870 (410) 548-4860

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CORROSION-RESISTANT COMPOUND CAMPAIGNS
DEALER INFORMATION PACKET

PART TWO – STATE COMPLIANCE SUPPLEMENT FOR MARYLAND

APPENDIX B – RECORDKEEPING FORMS AND OTHER DOCUMENTS FOR MARYLAND

Your dealership should maintain appropriate compliance records. To assist you, TMS has developed two documents:

⇒ **CRC Campaign Daily Vehicle Production Log**: Maintain this log to track the time spent on each vehicle, and thereby demonstrate your dealership's adherence to the vehicle processing limit and compliance with the allowable PM emissions rate. This log also allows your dealership to determine total VOC and PM emissions from the CRC campaigns on a daily, monthly and annual basis.

⇒ **Maryland Personnel Training Log**: Maintain this log to demonstrate that the employees conducting the CRC campaigns have been trained.

In addition to the foregoing documents, your dealership also should maintain copies of the following documents on file:

⇒ Process Overview for Toyota Motor Sales, U.S.A., Inc. CRC Campaigns;

⇒ The material safety data sheets for the two CRCs – Noxudol 300S and 712AM – being used for the CRC campaigns;

⇒ Vaupel HSDR 3300 Spray Equipment Manufacturer's Specifications;

⇒ CRC Campaigns Air Emissions Calculation Summary; and

⇒ The Maryland Department of the Environment's August 26, 2011 letter regarding applicability of the *de minimis* exemption from air permitting to the CRC campaigns.

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DEALER INFORMATION PACKET

CRC CAMPAIGN DAILY VEHICLE PRODUCTION LOG
MARYLAND

You have two options for completing the CRC Campaign Daily Vehicle Production Log (VPL). Choose the option that fits best with your dealership's operations.

- **Option 1 – Electronic VPL Spreadsheet.** (Microsoft Excel version -- available on the C.L.E.A.N. Dealer website (http://cleandealer.com)):
  - TMS has developed a VPL spreadsheet that will automatically calculate total VOCs and PM emissions from the CRC campaigns on a daily and monthly basis
  - ***If your dealership has the ability to create and maintain electronic records, then* Option *1 will be the easiest for you.***
  - REMEMBER: It is important to follow the instructions on the spreadsheet carefully to ensure accuracy of the automatic VOC and PM emissions calculations.
- **Option 2 – Hard-Copy VPL**
  - For dealerships not able to utilize Option 1, TMS has developed a hard copy VPL that you will fill out manually to create appropriate records.
  - On any given day, you can choose between two different approaches to completing the hard copy VPL:
    - **Emissions Estimator Table Approach**: Use the Emissions Estimator Table to determine the VOC and PM emissions respectively for each CRC kit type (*i.e.*, part number) based on the number of vehicles processed with the kit type on a particular day and enter the emissions on the VPL; then sum the emissions entered on the VPL for the Daily Total. ***The Emissions Estimator Table approach may be best if your dealership is processing a small number of vehicles on a given day.***.
    - **Total Emissions Calculator Approach**: Use the Total Emissions Calculator to determine the Daily Total of VOC and PM emissions respectively based on emissions factors provided for each CRC kit type (*i.e.*, part number) and the number of each kit type used during the time period. Enter this total on the VPL. ***The Total Emissions Calculator approach may be best if your dealership is processing a larger number of vehicles on a given day.***

Use the **CRC Usage Calculator** on the Hard-Copy VPL to calculate the amount of each CRC Material used based on the number of each kit type used by your dealership

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Instructions for Completing the Maryland CRC Campaign Daily Vehicle Production Log

Step 1: Enter your dealership's name and the recording period at the top of each page of the

Step 2: For each day that you process vehicles, enter 1) each vehicle's make and model year and 2) the time processing was completed.

REMEMBER: To comply with air emissions limits, you should not process more than one vehicle every two hours.

Step 3: For each day that you process vehicles, enter the total number of vehicles processed with each CRC kit (part number).

Dealership Name: _____ Recording Period: _____ [Month/Year]

Date	Vehicle(s) and Completion Time(s)	Number of Vehicles Processed With Each Kit (Part Number)		Emissions	
				VOC (lbs)	PM (lbs)
7/15/13	Tundra '04 – 8:30 Sequoia '03 – 10:30 Tundra '02 - 1:00 Tundra '05 – 3:00 Sequoia '01 – 5:00 Tundra '05 – 7:30	00289-**T00KT**-DS	3	0.36	0.30
		00289-**S00KT**-DS	2	0.32	0.22
		00289-**T01KT**-DS	1	0.05	0.06
			Daily Total	0.73	0.58
7/18/13	Tundra '03 -10:00 Tundra '00 - 12:00 Tundra '06 – 2:00 Tundra '02- 4:30 Tundra '01 – 7:00	00289-**T00KT**-DS	1	0.12	0.10
		00289-**S00KT**-DS	0	0	0
		00289-**T01KT**-DS	4	0.20	0.24
			Daily Total	0.32	0.34

Step 4: Determine emissions using either Step 4-A or Step 4-B.

Step 4-A (If using Emissions Estimator Approach): Using the Emissions Estimator below, enter the VOC and PM emissions respectively on the VPL for each kit type based on the number of vehicles processed with the kit type that day. Add up the values in the VOC column and enter the "Daily Total". Do the same for the PM column.

EMISSIONS ESTIMATOR

Locate the VOC and PM emission values in the table below that correspond to the number of vehicles processed with each CRC kit type. Enter those values in the appropriate box on the VPL. Add up the values in each column for the Daily Total of VOC and of PM emissions.

Kit (Part Number):		Number of Vehicles Processed					
		1	2	3	4	5	6
00289-**T00KT**-DS	VOC	0.12	0.24	0.36	0.48	0.6	0.72
	PM	0.10	0.20	0.30	0.40	0.50	0.60
00289-**S00KT**-DS	VOC	0.16	0.32	0.48	0.64	0.8	0.96
	PM	0.11	0.22	0.33	0.44	0.55	0.66
00289-**T01KT**-DS	VOC	0.05	0.10	0.15	0.20	0.25	0.3
	PM	0.06	0.12	0.18	0.24	0.30	0.36

Step 4-B (If using Total Emissions Calculator Approach): Do not use the Emissions Estimator or enter the VOC and PM emissions for each kit type. Instead, at the end of each day, use the Total Emissions Calculator below to calculate VOC emissions and enter the "Daily Total" on the VPL. Do the same for PM.

TOTAL EMISSIONS CALCULATOR

Enter in Column A below the number of vehicles processed with each CRC kit type. Then, in Column B (VOCs) and Column C (PM), multiply the number of each kit type entered in Column A by the emission factor provided for that kit type. Finally, add up the values in Column B and in Column C to determine the total VOC and PM emissions for that day.

	A	B	C
Kit (Part Number)	Number of Kits Used	VOC (lbs)	PM (lbs)
00289-**T00KT**-DS	3	Multiply Col. A x **0.12** = 0.36	Multiply Col. A x **0.10** = 0.30
00289-**S00KT**-DS	2	Multiply Col. A x **0.16** = 0.32	Multiply Col. A x **0.11** = 0.22
00289-**T01KT**-DS	1	Multiply Col. A x **0.05** = 0.05	Multiply Col. A x **0.06** = 0.06
	Total	Sum of column B = 0.73	Sum of column C = 0.58

KIT REFERENCE TABLE:

Kit (Part Number)	Liters of Noxudol 300 S (VOC content = 0.09 lbs/gal)	Liters of 712 AM (VOC content = 0.165 lbs/gal)
00289-**T00KT**-DS	3	1
00289-**S00KT**-DS	3	2
00289-**T01KT**-DS	2	0

Dealership: _____ Recording Period: _____
[Month/Year]

Maryland CRC Campaign Daily Vehicle Production Log

Date	Vehicles & Time(s) of Completion	Kit (Part Number)	# Kits Used	Emissions	
				VOC (lbs)	PM (lbs)
		00289-T00KT-DS			
		00289-S00KT-DS			
		00289-T01KT-DS			
			Daily Total		
		00289-T00KT-DS			
		00289-S00KT-DS			
		00289-T01KT-DS			
			Daily Total		
		00289-T00KT-DS			
		00289-S00KT-DS			
		00289-T01KT-DS			
			Daily Total		
		00289-T00KT-DS			
		00289-S00KT-DS			
		00289-T01KT-DS			
			Daily Total		
		00289-T00KT-DS			
		00289-S00KT-DS			
		00289-T01KT-DS			
			Daily Total		
		00289-T00KT-DS			
		00289-S00KT-DS			
		00289-T01KT-DS			
			Daily Total		
		00289-T00KT-DS			
		00289-S00KT-DS			
		00289-T01KT-DS			
			Daily Total		
		00289-T00KT-DS			
		00289-S00KT-DS			
		00289-T01KT-DS			
			Daily Total		
		00289-T00KT-DS			
		00289-S00KT-DS			
		00289-T01KT-DS			
			Daily Total		

Duplicate as Necessary

Maintain these documents in your dealership's records for a period of five (5) years after your dealership ceases its involvement in CRC Campaigns.

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Dealership: _____ Recording Period: _____
[Month/Year]

EMISSIONS ESTIMATOR

Locate the VOC and PM emission values in the table below that correspond to the number of vehicles processed with each CRC Kit type. Enter those values in the appropriate box on the VPL. Add up the values in each column for the Daily Total of VOC and PM emissions.

		Number of Vehicles Processed					
Kit (Part Number):		**1**	**2**	**3**	**4**	**5**	**6**
00289-**T00KT**-DS	**VOC**	0.12	0.24	0.36	0.48	0.6	0.72
	PM	0.10	0.20	0.30	0.40	0.50	0.60
00289-**S00KT**-DS	**VOC**	0.16	0.32	0.48	0.64	0.8	0.96
	PM	0.11	0.22	0.33	0.44	0.55	0.66
00289-**T01KT**-DS	**VOC**	0.05	0.10	0.15	0.20	0.25	0.3
	PM	0.06	0.12	0.18	0.24	0.30	0.36

TOTAL EMISSIONS CALCULATOR

Enter in Column A below the number of vehicles processed with each CRC Kit type. Then, in Column B (VOCs) and Column C (PM), multiply the number of each kit type entered in Column A by the emission factor provided for that kit type. Finally, add up the values in Column B and in Column C to determine the total VOC and PM emissions for that day.

	A	B	C
Kit (Part Number)	Number of Vehicles Processed	VOC (lbs)	PM (lbs)
00289-**T00KT**-DS		Multiply Col. A x **0.12** = ____	Multiply Col. A x **0.10** = ____
00289-**S00KT**-DS		Multiply Col. A x **0.16** = ____	Multiply Col. A x **0.11** = ____
00289-**T01KT**-DS		Multiply Col. A x **0.05** = ____	Multiply Col. A x **0.06** = ____
	Total	Sum of column B = ____	Sum of column C = ____

Duplicate as Necessary

Maintain these documents in your dealership's records for a period of five (5) years after your dealership ceases its involvement in CRC Campaigns.

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Maryland Personnel Training Log

Dealership name and location: _____ **CRC Campaign** _____

Instructions: Dealerships must use this log to confirm that the employees conducting the Sequoia C0D have been trained as required by COMAR 26.11.19.23(H)(2)(d). A copy of this log must be kept in your records for five years after completion of the C0D.

Pursuant to Pursuant to COMAR 26.11.19.23(H)(2)(d), the undersigned have reviewed all of the Corrosion Resistant Compound Campaign materials and understand the proper use, handling and operation of the CRC materials and equipment.

Employee Names/Date Trained:

_____

_____

_____

_____

_____

_____

_____

_____

Signature of Dealer Principal:

_____

Date:

_____

Address & Contact Information for Dealer Principal:

_____

_____

_____

This record must be maintained for 5 years after your dealership ceases its involvement in CRC campaigns.

Duplicate as Necessary

CORROSION-RESISTANT COMPOUND CAMPAIGNS
DEALER INFORMATION PACKET

CRC CAMPAIGN PROCESS OVERVIEW

Toyota has launched Corrosion-Resistant Compound ("CRC") campaigns for particular vehicles registered in certain cold climate states with high road salt use ("Cold Climate States") to address the potential for greater than expected levels of vehicle frame corrosion. This "CRC Campaign Process Overview" provides a general description of the process being used by Toyota dealers to apply CRCs to vehicle frame surfaces.

The CRC Campaigns entail the application of two Class IIIB combustible liquids ("CRCs") to an eligible vehicle's frame -- one to the exterior and the other to interior frame surfaces -- using a Vaupel HSDR 3300 spray gun. Toyota has issued dealers 2 of these spray guns, with instructions to dedicate one to the interior and the other to the exterior CRC and to use these guns only for the CRC campaigns. The CRC campaigns are occurring indoors in an existing dealership service area. Dealers have been instructed to comply with fire, zoning, air and building codes when conducting the CRC campaigns, including to comply with all recordkeeping and material handling requirements.

The CRC campaigns process consists of three primary steps:

1. **Work Area Setup**
2. **Vehicle Inspection and Preparation**
3. **CRC Application**

Step 1: Work Area Setup. Dealers are conducting the CRC campaigns in a dedicated work space in the dealership's service area that has a vehicle lift, is well ventilated, is located away from other vehicles, is at least 20 feet away from open flames, spark-producing equipment and drying, curing or fusion apparatuses, has appropriately-rated fire extinguishers in the immediate vicinity and can be sectioned off with temporary partitions. No physical alteration of the workspace or installation of new equipment is required for the CRC campaigns.

Step 2: Vehicle Inspection and Preparation. Dealers should employ the following procedures to prepare their service areas and vehicles for spraying.

- *Visually Inspect for Frame Perforation Based On Toyota Inspection Criteria*. If the vehicle frame has perforation in excess of Toyota's inspection criteria, then it will be replaced and CRCs will not be applied.
- *Clean Frame*. It may be necessary to clean the frame with mechanical methods, including pressure washing. No chemicals or solvents will be used to clean the frame.
- *Place Vehicle on Lift*. Raise the vehicle using the vehicle lift; remove certain vehicle components as necessary to apply the CRCs to the vehicle frame (*e.g.*, tires and wheels, spare tire, engine under cover, bumper cover, etc.).
- *Work Area Setup*. Place tarp beneath vehicle and set up temporary partitions around vehicle. Tarps are intended to capture limited overspray and to facilitate clean-up.
- *Prepare Frame*. Manually remove rust from frame using scraper, chisel, and/or compressed air (*e.g.*, air scalers).

- *Clean Frame (Secondary Cleaning)*. Manually remove any remaining rust or dirt using wire brush and air nozzle.
- *Secondary Visual Inspection*. Visually inspect the frame to ensure no perforation meeting Toyota's criteria was uncovered during the manual rust removal and cleaning process.
- *Temperature Measurement*. Use an infrared thermometer to ensure the vehicle exhaust system has sufficiently cooled prior to any spraying.
- *Mask Parts*. Mask areas not to be sprayed (*e.g.*, drive shaft, brake/hub assemblies, exhaust, other electrical components, etc.).
- *Attach Plastic Sheet*: Attach plastic sheet to frame capture any internal CRC that may drip through small holes in the frame; use magnets to suspend a plastic sheet underneath the frame.

Step 3: CRC Application. Dealers should apply the CRCs to vehicle frame surfaces as follows:

- *Setup Spray Gun for Internal Frame CRC Application*. Prepare the Vaupel HSDR 3300 spray gun dedicated to the interior CRC.
- *Apply CRC to Interior of Frame*. Insert select spray nozzle a specified distance into holes in the frame identified in the Technical Instructions for the particular CRC campaign. Press spray gun trigger and pull out nozzle at fixed speed while spraying interior surface of frame with the CRC. Complete the number of laps indicated in the Technical Instructions for each hole. When finished, wipe away any residual CRC on the frame's exterior with cloths or paper towels.
- *Remove Plastic Sheet Suspended From Frame*.
- *Install Foam Blocks and Body Plugs*. After spraying the CRC to the frame interior, insert foam blocks and body plugs to keep CRC in the frame's interior and to limit water and road spray from entering the frame or cross-members.
- *Setup Spray Gun for External Frame CRC Application*. Prepare the Vaupel HSDR 3300 spray gun dedicated to the exterior CRC.
- *Apply CRC to Frame Exterior*. Following spray gun set up, hold the unidirectional handheld spray nozzle a distances from the frame surface specified in the Technical Instructions for the particular CRC campaign. Press spray gun trigger and spray the CRC on the top of portion of the frame by moving spray nozzle at fixed speed across frame surface.
- *Apply External Frame CRC to Lift Contact Points*. Lower the vehicle halfway, reinstall wheels, lower vehicle and apply CRC to the areas where the lift arms touched.
- *Raise Vehicle to Facilitate Post Spray Vehicle Restoration*. Raise the vehicle and remove protective tape and all fire retardant sheeting and plastic coverings.
- *Take Final Steps Necessary to Return Vehicle Customer*. Reinstall components (such as the engine undercover); lower vehicle from lift; complete reinstallation of other components (such as the rear bumper cover); and place vehicle in a location where CRCs can cure for 24 hours before returning vehicle to customer.

MATERIAL SAFETY DATA SHEET

PARKER INDUSTRIES

16-8, NIHONBASHI 2-CHOME,
CHUO-KU, TOKYO 103-0027, JAPAN
TELEPHONE: (03) 5205-1973
FAX: (03) 5205-1981

EMERGENCY CONTACT:
CHEMTREC (800) 424-9300

HMIS HAZARD RATING

HEALTH	1
FIRE	1
REACTIVITY	0
PERSONAL PROTECTION	B

Date of Review:	Revised: March 17, 2011
Date of Preparation: November 14, 2007	By: Y.Yamada

SECTION 1: PRODUCT IDENTIFICATION

Product Name: **712AM**
Chemical Family: Petroleum oil/additive blend
Material Usage: Corrosion Preventive Compound

EMERGENCY OVERVIEW: Petroleum oil-based product. When product burns it releases typical hydrocarbon products of combustion. Refer to Section 3 for health effects and to Section 5 for fire hazard data.

SECTION 2: HAZARDOUS INGREDIENTS

Component	Wt%	Recommended Exposure Limits (TWA)
Microcrystalline wax CAS #64742-42-3	5-10	ACGIH TLV: 2 mg/m^3 OSHA PEL: 2 mg/m^3
Petroleum distillates, solvent dewaxed heavy paraffinic CAS #64742-65-0	5-15	ACGIH TLV: 5 mg/m^3 OSHA PEL: 5 mg/m^3
Sulfonic acids, petroleum, Calcium salts, overbased CAS #68783-96-0	5-15	ACGIH TLV: 5 mg/m^3 (oil mist) OSHA PEL: 5 mg/m^3 (oil mist)
White mineral oil, petroleum CAS #8042-47-5	50-60	ACGIH TLV: 5 mg/m^3 (oil mist) OSHA PEL: 5 mg/m^3 (oil mist)
Bentonite, quaternary ammonium compound modified CAS# 68953-58-2	0.3-1.0	Not established

Soybean oil polymer with isophthalic acid and pentaerythritol CAS# 66071-86-1	0.4-4	Not established
Castor oil, dehydrated, polymerized CAS# 68038-02-8	5-15	Not established
Calcium Carbonate CAS #471-34-1	5-10	OSHA PEL: 5 mg/m^3 (respirable fraction) OSHA PEL: 15 mg/m^3 (total dust) ACGIH TLV: 10 mg/m^3 ([2] nuisance dust)

[2] This component poses a hazard only if a dust is formed, i.e., by sawing, sanding, drilling, etc.

SECTION 3: HEALTH HAZARD INFORMATION

Primary Routes of Entry: Skin absorption, eyes (splashing).
Acute Effects: May cause eye irritation and reversible skin irritation. Prolonged skin exposure may cause dermatitis or oil acne. Breathing mists may cause dizziness or pulmonary irritation.
Chronic Overexposure:
Carcinogenicity: None of the components of this product are listed as carcinogens by NTP, IARC, or OSHA 1910(Z).
Pre-Existing Medical Conditions Aggravated by Exposure: Exposure may aggravate pre-existing respiratory or skin problems.

SECTION 4: FIRST AID PROCEDURES

Inhalation (mist): Move victim to fresh air and call emergency medical care. If not breathing, give artificial respiration; if breathing is difficult, give oxygen.
Eyes: In case of contact with material, immediately flush eyes with running water for at least 15 minutes. Seek immediate medical attention.
Skin: Wash skin with soap and water. Remove and isolate contaminated clothing and shoes at the site.
Ingestion: DO NOT INDUCE VOMITING. Consult a physician. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs.

SECTION 5: FIRE AND EXPLOSION HAZARD DATA

Flash Point: >200°C (TCC)
Explosive Limits: LEL: N/A UEL: N/A

EXTINGUISHING MEDIA: Small Fires: Dry chemical, CO_2, water spray, or regular foam. Large Fires: Water spray, fog, or regular foam. Move container from fire area if you can do it without risk. Apply cooling water to sides of containers that are exposed to flames until well after fire is out. Stay away from ends of tanks. For massive fire in cargo area, use unmanned hose holder or monitor nozzles. If this is impossible, withdraw from area and let fire burn. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tank due to fire.
Special Firefighting Protection/Emergency Action: Fire may produce irritating or poisonous gases. Positive pressure self-contained breathing apparatus (SCBA) and structural firefighters' protective clothing will provide limited protection. Keep unnecessary people away; isolate hazard area and deny entry. Stay upwind; keep out of low areas. Isolate for 1/2 mile in all directions if tank, rail car or tank truck is involved in fire. If runoff from fire control occurs, notify the appropriate authorities.
Unusual Fire/Explosion Hazards: Combustible material; may be ignited by flames. Container may explode in heat of fire.
Products of Combustion: Carbon monoxide, carbon dioxide, oxides of sulfur, miscellaneous hydrocarbons.

SECTION 6: SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

Steps to be taken in case Material is Released or Spilled: Shut off ignition sources; no flares, smoking or flames in hazard area. Stop leak if you can do it without risk.
Small Spills: Take up with sand or other noncombustible absorbent material and place into containers for later disposal.
Large Spills: Dike far ahead of liquid spill for later disposal.

SECTION 7: SAFE HANDLING INFORMATION

Precautions To Be Taken In Handling/Storage: Store in cool, well-ventilated area. Keep away from flames. Never use a torch to cut or weld on or near container.
Other Precautions: Never wear contaminated clothing. Launder or dry clean before wearing. Discard oil-soaked shoes. Wash thoroughly with soap and water (waterless hand cleaner may be helpful in removing residues) after use and before smoking or eating. Avoid excessive skin contact.

SECTION 8: EXPOSURE CONTROLS

Respiratory Protection: NIOSH-approved respirator for organic vapor and mist to control exposure where ventilation is inadequate.
Ventilation: General and local exhaust.
Personal Protective Equipment: Protective Gloves: Impervious gloves (Viton, PVOH, etc.) Eye Protection: Safety glasses with sideshields or chemical goggles. Other Protective Clothing or Equipment: If splashing is anticipated, wear rubber apron and boots or other protective equipment to minimize contact.

SECTION 9: REACTIVITY HAZARD DATA

Stability: Stable
Incompatibility: Strong acids, oxidizing agents.
Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, oxides of sulfur, miscellaneous hydrocarbons.
Hazardous Polymerization: Will not occur.

SECTION 10: PHYSICAL AND CHEMICAL PROPERTIES

Color:	Tan
Appearance:	Viscous Liquid
Odor:	Oil
Boiling Point (initial):	NA
Evaporation Rate (n-Butyl Acetate=1):	<<1
Vapor Pressure (mmHg @ 20°C):	3.4
Vapor Density (air=1):	NA
Solubility in Water:	Not Determined
Specific Gravity:	.9-1.0
pH:	Not Applicable
Percent Volatile by Volume:	0

SECTION 11: DISPOSAL CONSIDERATIONS

Waste Disposal Methods: Dispose of in accordance with state, local and federal regulations. Materials may become a hazardous waste through use. If permitted, incineration may be practiced. Consider recycling solvent.

SECTION 12: REGULATORY INFORMATION

Volatile Organic Content: (EPA Method 24)
VOC per gallon: 0.165 lbs/gal

EPA Hazardous Waste Number(s) (40CFR Part 261): D001
EPA Hazard Category (40CFR Part 370): DELAYED (CHRONIC)

SARA TITLE III
This product contains the following TOXIC CHEMICALS subject to the *Reporting Requirements of Sec. 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986, and of 40CFR Part 372:*

CHEMICAL	CAS NO.	WT %
NONE		

This product contains the following EXTREMELY HAZARDOUS SUBSTANCE(S) subject to the *Emergency Planning Requirements under Sec. 301-303 (40CFR Parts 300 and 355) and Emergency Release Notification Requirements under Sec. 304:*

CHEMICAL	CAS NO.	WT %	RQ/TPQ Lbs
NONE			

(CERCLA LIST) This product contains the following HAZARDOUS SUBSTANCE(S) subject to *Emergency Release Notification Requirements under Sec. 304 (40 CFR Part 302):*

CHEMICAL	CAS NO.	WT %	Final RQ Lbs
NONE			

CALIFORNIA PROPOSITION 65
This product may contain trace quantities of the following chemicals that are identified by the State of California under the Safe Drinking Water and Toxic Reinforcement Act of 1986 ("Proposition 65") as either a carcinogenic or reproductive hazard:

CHEMICAL	CAS NO.	Estimated Concentration %
NONE		

Although the information contained herein is believed to be reliable, it is furnished without warranty of any kind. This information is not intended to be all-inclusive as to the manner and conditions of use, handling, and storage.

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Noxudol 300 S
Product Codes: None
Product Use: Vehicle Underbody Coating

Synonyms: None
Chemical Name: Anti Rust Compound

Manufacturer: **Auson AB**
Verkstadsgatan 3
S-434 42 Kungsbacka
Sweden
www.auson.se
PHONE: +46 300-562000
FAX: +46 300-562001

US Distributor: **Soken Trade Corporation**
12055 Sherman Way
North Hollywood, CA
USA
www.noxudolusa.com
(800) 598-3535
(818) 308-8427

For Chemical Emergency (Spill, Leak, Fire, Exposure, or Accident) Call **CHEMTREC** Day or Night
USA or Canada: 1-800-424-9300 Outside USA or Canada: +1 703-527-3887 (collect calls ok)

PREPARED BY: MSDS Authoring Services
VERSION: 1

ISSUE DATE: March 1, 2011
SUPERSEDES DATE: None

2. COMPOSITION / INFORMATION ON INGREDIENTS

CONTAINING: HAZARDOUS AND/OR REGULATED COMPONENTS

Chemical Name	Amount % by Wt.	CAS Number	OSHA PEL (ppm)	ACGIH STEL (ppm)
Solvent-refined heavy paraffinic distillate	30-60%	64741-88-4	5	None
Petroleum sulfonate, calcium salt, calcium hydroxide and calcium carbonate dispersion	20-30%	68783-96-0	None	None
Fatty acids, tall-oil, polymers with isophthalic acid, pentaerythritol and tall oil	10-20%	68410-37-7	None	None
Paraffin and hydrocarbon waxes	10-20%	8002-74-2	None	2 (fume)
Calcium carbonate (limestone) used as filler/pigment	<2%	1317-65-3	15 for total dust; 5 for respirable fraction	10 for total dust; 3 for respirable fraction
Carbon black	1%	1333-86-4	3.5	3.5
Crystalline silica	<0.1%	14808-60-87	10/(%SiO2+2) (respirable)	2.5

California Prop 65: This product may contain trace quantities of chemicals that are identified by the State of California under the Safe Drinking Water and Toxic Reinforcement Act of 1986 ("Proposition 65") as either a carcinogenic or reproductive hazard.

HAZARDS DISCLOSURE: This product contains known hazardous materials in reportable levels as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200 except as listed above. As defined under Sara 311 and 312, this product contains known hazardous materials.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:
CAUTION! COMBUSTIBLE LIQUID.

HMIS/NFPA Rating: See Section 16

POTENTIAL HEALTH EFFECTS

ROUTES OF ENTRY: Skin contact, eye contact, inhalation and ingestion.

INHALATION: High vapor concentrations may cause headache, dizziness, fatigue, nausea, and vomiting.

INGESTION: May cause abdominal pain, nausea, and vomiting.

SKIN CONTACT: Contact may be irritating to skin. May defat skin.

EYE CONTACT: Contact may be irritating to eyes. May cause stinging.

CHRONIC EXPOSURE: There are currently no known adverse health effects associated with chronic exposure to this product.

ACUTE HEALTH HAZARDS: Moderate irritating to the skin. Slightly irritating to the eyes. May be harmful if inhaled.

AGGRAVATION OF PRE-EXISTING CONDITIONS: Persons with pre-existing skin disorders, eye problems, or respiratory function may be more susceptible to the effects of this substance.

TARGET ORGANS: Eyes, skin, and respiratory system.

CARCINOGENICITY:
OSHA: Not listed ACGIH: Not listed NTP: Not listed IARC: Not listed

POTENTIAL ENVIRONMENTAL EFFECTS: Not considered to be harmful to aquatic life.

4. EMERGENCY AND FIRST AID PROCEDURES

INHALATION FIRST AID: If inhalation is experienced or suspected, move exposed person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately if symptoms persist.

SKIN CONTACT FIRST AID: In case of contact, immediately flush skin with soap and water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops.

EYE CONTACT FIRST AID: Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately if symptoms persist.

INGESTION FIRST AID: If swallowed, give a few tablespoons of cooking oil, sour cream, cream, or other liquid fat. Contact the poison control center. DO NOT INDUCE VOMITING unless directed to by a poison control center or physician. Never give anything by mouth to an unconscious person.

STATEMENT OF PRACTICAL TREATMENT: Always have plenty of water available for first aid. Get medical attention if any symptoms develop or persist.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: This product has low oral, dermal, and inhalation toxicity. Aspiration during swallowing or vomiting may severely damage the lungs.

5. FIRE AND EXPLOSION HAZARD DATA

FLAMMABLE PROPERTIES: Not flammable. Combustible.

AUTO IGNITION TEMPERATURE (ASTM E659):
HOT-FLAME AUTOIGNITION TEMPERATURE (AIT):
MINIMUM IGNITION TEMPERATURE: 750°F
IGNITION DELAY: 12 Seconds
BAROMETRIC PRESSURE, TORR: 766

COOL-FLAME AUTOIGNITION TEMPERATURE (CFT):
MINIMUM IGNITION TEMPERATURE: 745°F
IGNITION DELAY: 120 Seconds
BAROMETRIC PRESSURE, TORR: 766

REACTION THRESHOLD TEMPERATURE FOR PRE-FLAME (RTT):
MIMIMUM REACTION TEMPERATURE: 740°F

LIMITS OF FLAMMABILITY IN GENERAL ACCORDANCE WITH ASTM E-681 AT 200°C
LOWER FLAMMABLE LIMIT (LFL): 1.81 %
UPPER FLAMMABLE LIMIT (UFL): See Note
Note: *Due to the nature of the sample and its addition into the test apparatus, it is difficult to determine the upper flammable limit.*

FLASH POINT: 140°C 285°F Method Used: ASTM D93

EXTINGUISHING MEDIA: Dry chemical, foam or carbon dioxide.

UNSUITABLE EXTINGUISHING MEDIA: Water spray may be unsuitable.

FIRE & EXPLOSION HAZARDS: Above flash point, vapor-air mixtures are explosive within flammable limits noted above. Containers may explode when involved in a fire.

PRECAUTIONS FOR FIREFIGHTERS: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode. Toxic gases and vapors may be released if involved in a fire.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Not applicable

HAZARDOUS DECOMPOSITION OR COMBUSTION PRODUCTS: Not available.

6. ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: Remove all sources of ignition.

PERSONAL PRECAUTIONS: Wear appropriate protective clothing (see SECTION 8). Isolate release area and deny entry to unnecessary and unprotected personnel.

ENVIRONMENTAL PRECAUTIONS: Do not allow spill to enter sewers or waterways. Do not flush to sewer.

METHODS FOR CONTAINMENT: Contain spill with sand or earth. Do not use combustible materials, such as sawdust.

METHODS FOR CLEAN-UP: Collect spilled material and non-combustible absorbent and place in a container for disposal. Clean spill area thoroughly.

OTHER INFORMATION: Report spills to authorities as required.

7. HANDLING AND STORAGE

RECOMMENDED STORAGE CONDITIONS: Keep in a tightly closed original container, at temperatures less than 105°F (40°C). Keep containers closed when not in use.

SHELF LIFE: See label on packaging.

HANDLING (PERSONNEL): Wear appropriate personal protective equipment (see SECTION 8). Avoid contact with eyes. Avoid contact with skin or clothing. Avoid breathing vapors. Use only with adequate ventilation. Wash thoroughly with soap and water after handling. Keep away from heat, flames, and sparks.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

AIRBORNE EXPOSURE LIMITS: See Section 2 above.

CAS NO.	**CHEMICAL NAME**
64741-88-4	Solvent-refined heavy paraffinic distillate
	mg/m3
OSHA PEL-TWA:	5
OSHA PEL STEL:	none
OSHA PEL CEILING:	none
ACGIH TLV-TWA:	5
ACGIH TLV STEL:	none
ACGIH TLV CEILING:	none
68783-96-0	PETROLEUM SULFONATE, CALCIUM SALT, CALCIUM HYDROXIDE AND CALCIUM CARBONATE DISPERSION
	MG/M3
OSHA PEL-TWA:	NONE
OSHA PEL STEL:	NONE
OSHA PEL CEILING:	NONE
ACGIH TLV-TWA:	NONE
ACGIH TLV STEL:	NONE
ACGIH TLV CEILING:	NONE
68410-37-7	FATTY ACIDS, TALL-OIL, POLYMERS WITH ISOPHTHALIC ACID, PENTAERYTHRITOL AND TALL OIL
	MG/M3
OSHA PEL-TWA:	NONE
OSHA PEL STEL:	NONE
OSHA PEL CEILING:	NONE
ACGIH TLV-TWA:	NONE
ACGIH TLV STEL:	NONE
ACGIH TLV CEILING:	NONE
8002-74-2	PARAFFIN AND HYDROCARBON WAXES
	MG/M3
OSHA PEL-TWA:	NONE
OSHA PEL STEL:	NONE
OSHA PEL CEILING:	NONE
ACGIH TLV-TWA:	2 (FUME)
ACGIH TLV STEL:	NONE
ACGIH TLV CEILING:	NONE

CALIFORNIA PROPOSITION 65: This product may contain trace quantities of chemicals that are identified by

the state of California under the safe drinking water and toxic reinforcement act of 1986 ("proposition 65") as either a carcinogenic or reproductive hazard:

1317-65-3	CALCIUM CARBONATE (LIMESTONE)
	MG/M3
OSHA PEL-TWA:	15 FOR TOTAL DUST; 5 FOR RESPIRABLE FRACTION
OSHA PEL STEL:	NONE
OSHA PEL CEILING:	NONE
ACGIH TLV-TWA:	0 FOR TOTAL DUST; 3 FOR RESPIRABLE FRACTION
ACGIH TLV STEL:	NONE
ACGIH TLV CEILING:	NONE
1333-86-4	CARBON BLACK
	MG/M3
OSHA PEL-TWA:	3.5
OSHA PEL STEL:	NONE
OSHA PEL CEILING:	NONE
ACGIH TLV-TWA:	3.5
ACGIH TLV STEL:	NONE
ACGIH TLV CEILING:	NONE
14808-60-7	CRYSTALLINE SILICA
	MG/M3
OSHA PEL-TWA:	10/(%SIO2+2) (RESPIRABLE)
OSHA PEL STEL:	NONE
OSHA PEL CEILING:	NONE
ACGIH TLV-TWA:	0.025 (RESPIRABLE)
ACGIH TLV STEL:	NONE
ACGIH TLV CEILING:	NONE

(Crystalline Silica and carbon black only present hazards as respirable particles of 10 microns or less. Both are bound in the coating and will not be released as respirable particles)

VENTILATION SYSTEM: A system of local and/or general exhaust is recommended to keep employee exposures below the airborne exposure limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

PERSONAL RESPIRATORS (NIOSH APPROVED): If respirator use is desired, or if exposure limit values are exceeded, use NIOSH approved respirator and type A filters (brown, organic substances).

SKIN PROTECTION: Avoid prolonged skin contact. Chemical resistant (nitrile) gloves recommended for operations where skin contact is likely. Wear appropriate protective clothing or boots as needed. Workers should wash exposed skin several times daily with soap and water. Soiled work clothing should be laundered or dry-cleaned.

EYE PROTECTION: Safety glasses, chemical type goggles, or face shield recommended to prevent eye contact.

GENERAL HYGIENIC PRACTICES: Wash thoroughly with soap and water after handling, before eating, drinking, smoking, or using toilet facilities. Do not smoke during use.

9. PHYSICAL/CHEMICAL CHARACTERISTICS

FORM: Highly viscous liquid

COLOR: Black

ODOR: Slight mineral oil like odor

BOILING POINT: >390°F (>200°C)

SOLUBILITY IN WATER: Not soluble in water

SPECIFIC GRAVITY: .96 at 20°C (68°F) (Water =1)

EVAPORATION RATE: (BuAc=1): Not applicable

POUR POINT (ASTM) D97): +30

AUTOIGNITION TEMPERATURE: >750°F 399°C)

FLASH POINT: 285°F (140°C) ASTM D93

pH: Not available

PERCENT SOLIDS BY WEIGHT: 98.9%

VISCOSITY: 500-650 Mpas - 73.4°F (23°C)

VOLATILE ORGANIC COMPOUNDS (VOC): 10.7 g/L using EPA Method 24
COLD FREEZE POINT (ASTM D97): +25

FREEZING POINT (ASTM D1177): This sample was too viscous to permit determination of its freeze point by ASTM 1177.

VAPOR PRESSURE By Isoteniscope (ASTM D2879), torr:

32°F	0.28
68°F	1.0
100°F	2.7
150°F	11
200°F	34
250°F	90
300°F	160
350°F	270
400°F	426
450°F	600
485°F	760

10. STABILITY AND REACTIVITY

STABILITY: Stable under ordinary conditions (70°F (21°C) and 14.7 psig (760 mmHg)), of use and storage.

CONDITIONS TO AVOID: Combustible atmospheres. Heat, flames, ignition sources, water (absorbs readily) and incompatibles.

POLYMERIZATION: Not available.

INCOMPATIBILITY WITH OTHER MATERIALS: Do not store near other combustible materials.

DECOMPOSITION: Not available.

11. TOXICOLOGICAL INFORMATION

EFFECTS OF EXPOSURE

ACUTE INHALATION: LC50 not available

EYES: Irritant

SKIN: Irritant

ACUTE INGESTION: LD50 not available

CHRONIC EFFECTS/CARCINOGENICITY: Calcium carbonate, the product itself, is not listed by NTP, IARC, or OSHA as a carcinogen. There is no reported health effects associated with prolonged exposure to pure calcium carbonate. This product contains variable quantities of crystalline silica (quartz), which is considered a hazard by inhalation. IARC has classified crystalline silica as probably carcinogenic for humans (2A). This classification is based on the findings of laboratory animal studies that were considered to provide sufficient evidence and data from human epidemiological studies that were considered to provide limited evidence for carcinogenicity.

Crystalline silica is also a known cause of silicosis, a noncancerous lung disease. NTP and OSHA have not classified crystalline silica as a carcinogen.

Carbon black has been classified by IRAC as a Category 2B (known animal carcinogen, possible human carcinogen) material. This was based on the results of rat inhalation studies of carbon black, despite the lack of parallel evidence on humans or other animal species

MUTAGENIC OR REPRODUCTIVE/DEVELOPMENTAL EFFECTS: None expected.

12. ECOLOGICAL INFORMATION

ECOTOXICITY: This product is not toxic or harmful to the environment.

PERSISTENCE AND DEGRADABILITY: This product is not readily degradable.

MOBILITY: Highly viscous liquid is not water soluble and is not expected to be mobile.

BIOACCUMULATION: This product is not expected to bioaccumulate.

13. DISPOSAL DATA

WASTE DISPOSAL METHOD: It is the responsibility of the generator to determine at the time of disposal the proper classification and method of disposal. Disposal should be in accordance with applicable federal, state, and local regulations. Local regulations may be more stringent than regional or national requirements.

RCRA INFORMATION: If this material as supplied becomes a waste, it does not meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

CONTAMINATED MATERIALS: Wash contaminated clothing before reuse.

14. TRANSPORTATION DATA

Domestic (Land, D.O.T.), International (Water, I.M.O.), International (Air, I.C.A.O.)

CLASS:	None
PRODUCT LABEL:	Noxudol 300 S
UN NUMBER:	None
PACKING GROUP:	None
D.O.T. SHIPPING NAME:	Consumer Commodity, ORM-D
PRODUCT RQ (LBS):	None
ERG Guide Number:	None
SUPPLEMENTAL HAZARD:	None
VESSEL STOWAGE LOCATION:	None
SHIPPING RESTRICTIONS:	None

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATORY STATUS

TSCA (TOXIC SUBSTANCE CONTROL ACT): All of the components of this product are listed on the TSCA inventory.

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): This product is NOT subject to CERCLA reporting requirements; however, many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT): This product does not contain any chemicals subject to SARA Title III. 311/312 HAZARD CATEGORIES: Slight Health Hazard, Slight Flammability Hazard

CAA (CLEAN AIR ACT): This product conforms to the VOC limits listed under Subpart B: National Volatile Organic Compound Emission Standards for Automobile Refinish Coatings under Section 183(e)(3)(C).

OTC (OZONE TRANSPORT COMMISSION): This product conforms to the VOC limits listed in Model Rule 2009 – Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations.

STATE REGULATIONS:

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65): This product is known to contain chemicals currently listed as carcinogens or reproductive toxins as regulated under California Proposition 65.

California Air Resource Board (CARB) Suggested Control Measure for Automotive Coatings: This product conforms to the VOC limit for the automotive undercoating.

LOCAL REGULATIONS

SCAQMD (SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT) RULE 1151: This product conforms to the VOC limits listed under Rule 1151—Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations, Appendix A.

BAAQMD (BAY AREA AIR QUALITY MANAGEMENT DISTRICT) RULE 8-45: This product conforms to the VOC limits listed under Rule 8-45—Motor Vehicle and Mobile Equipment Coating Operations.

INTERNATIONAL REGULATIONS:

Europe: All ingredients conform to the EU requirements.
Regulation (EC) nr. 1907/2006
EEC-directive 2006/121/2006
No label required

16. OTHER INFORMATION

Label Requirements: WARNING! COMBUSTABLE!

Hazardous Material Information System (HMIS):	**Health**	**1**
	Flammability	**1**
	Reactivity	**0**
	Personal Protection	

National Fire Protection Association (NFPA):	

NFPA Ratings: Health: 1, Flammability: 1, Reactivity: 0

NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme
Protective Equipment: Goggles & shield; lab coat & apron; vent hood; proper gloves; class b extinguisher.

Prepared By: Donato Polignone (MSDS Authoring Services)
Approved By: Soken Trade Corporation
Approval Date: April 18, 2011

Part Number: --

Supersedes Date: March 1, 2011

ADDITIONAL INFORMATION:

The data in this Material Safety Data Sheet relates only to the specific material designated herein. It does not relate to use in combination with any other material or in any process. This Material Safety Data Sheet (MSDS) has been reviewed to fully comply with the guidance contained in the ANSI MSDS standard (ANSI Z400.1-2004)

This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of Soken Trade Corporation. The data on this sheet are related only to the specific material designated herein. Soken Trade Corporation assumes no legal responsibility for use or reliance upon these data.

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

END OF MSDS

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OPERATING INSTRUCTIONS

CAVITY PRESSURE CONTAINER GUN 3300 HSDR

This gun may only be used for pressure containers which threads have a slot

Use as intended
- The CAVITY PRESSURE CONTAINER GUN is used for applying cavity spray products in conjunction with cavity spray tubes 3900 / 3901.

For your safety
- Hazard-free work with the device is only possible if you read the operating instructions and safety instructions through in full and strictly follow the instructions contained therein.
- Arrange to have practical instruction before your first use.
- Check the device before each use.
- Allow only a specialist to make repairs.
- Alteration or modification of the device is forbidden.
- Use only original accessories.
- Use the device only with the prescribed pressure.
- Do not spray into flames or onto glowing bodies.
- Working areas must be brightly lit, well ventilated and must conform to applicable health and work safety regulations.
- Do not inhale spray mist.
- Store the device and its accessories out of reach of children.

Device Characteristics

Max. Press. 8 bar ***Working Press. 2–6 bar***
Capacity 1 liter

Safety Instructions
- Check the gun for correct operation before use.
- The nozzle head **(19)** and ascending tube **(31)** must allow free flow.
- Check the gun for visible damage.
- When dealing with chemical materials, observe the
- appropriate guidelines and safety rules.

Start up
- Check line pressure in the compressed-air distribution system and adjust if necessary.
- For optimal operation of the compressed-air tool, clean, dry air is absolutely necessary.
  This can be provided by a water and oil separator integrated into the compressed-air system, which also considerably improves the spray behaviour.

Working Instructions / Application
- Fill the pressure container **(32)** with spray product.
- Immerse the pistol body with ascending tube into the spray product and screw the container to the underside of the gun.
- Insert cavity spray tube with round spray nozzle or cavity spray tube with angle nozzle and nipple into the quick coupling **(20)**.
- Connect the gun to the compressed-air supply. Depress the trigger to the first step and check whether spray air issues from the nozzle opening.
- Material flow rate is adjusted using the stop screw **(7)**. An optimal spray pattern for each material can be obtained with this adjustment.
- Insert the spray tube with round nozzle into the cavity and slowly withdraw it, while at the same time depressing the trigger. Release the trigger before the round nozzle leaves the cavity (this will interrupt material flow).
- When the spray tube with angle nozzle is inserted, surfaces can be sprayed.
- Make absolutely certain that the spray tubes are not bent.

When finished working
- Blow the cavity spray tube clear with air; for this, depress the trigger to the first step.
- Remove cavity spray tube, disconnect the device from the air supply.
- Release pressure from the gun, for this purpose, turn the pressure container to the left until air escapes.
- Store the device and its accessories out of reach of children.
- Store the gun only upright if material remains in the pressure tank.

Cleaning
- Clean the gun after each use with cleaning agent. (If the gun is to remain unused for an extended period of about 4 weeks).

Attention
- Store the spray tubes only when they are clean; otherwise the spray slits may become clogged due to drying of the material.

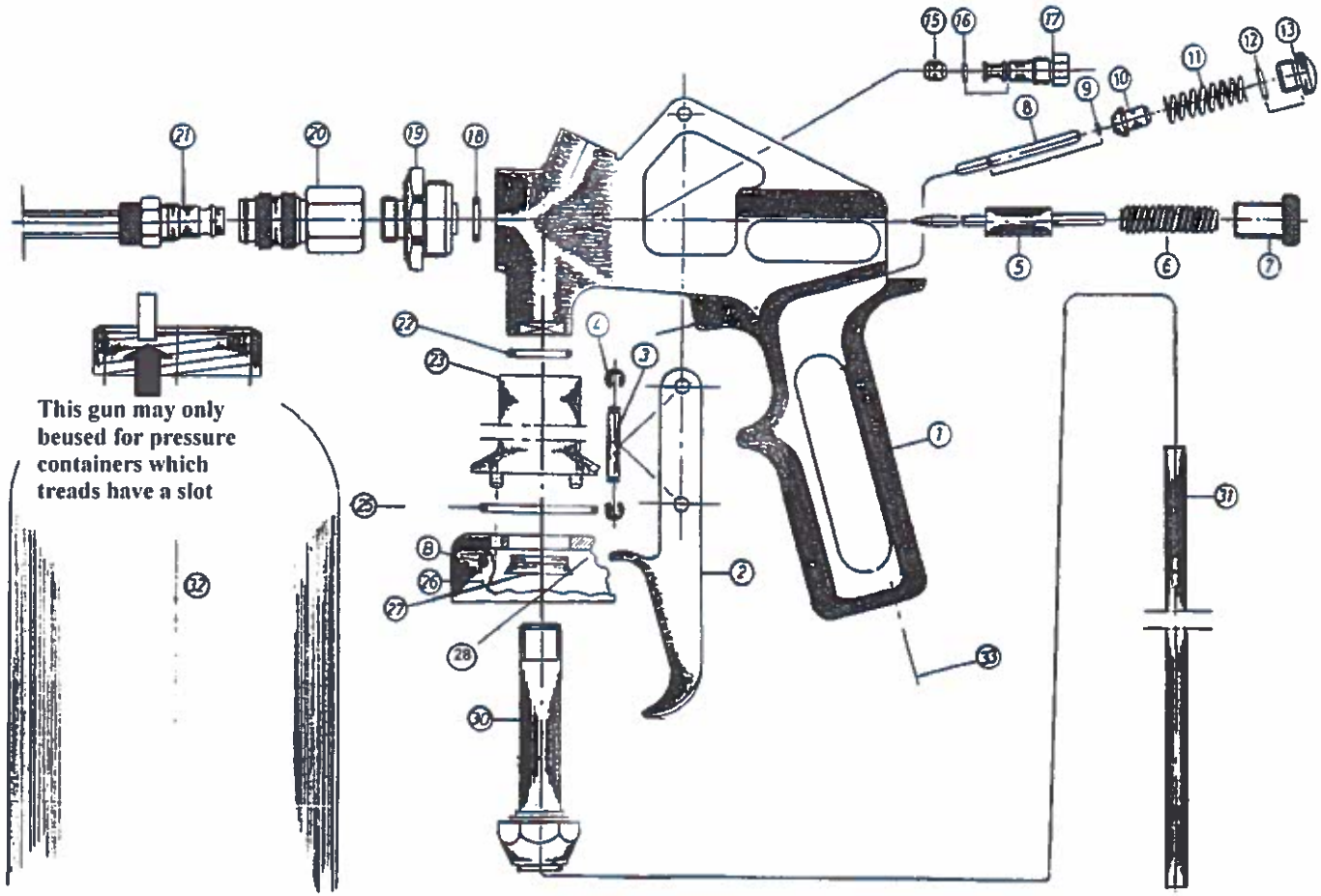
Faults
- Valve bolt **(8)** is stuck or does not close:
  Put oil on the valve bolt or into the air intake port of the gun. Depress the trigger **(2)** several times.
- Gun does not spray properly:
  Spray nozzle **(19)**, ascending tube **(31)**, cavity spray tube round spray or angle nozzle or gun **(1)** partly clogged. Remove deposits with cleaning agent.

Environmental Protection
- The device, its accessories and packing material should be recycled in an environmentally correct manner.

Druckbehälterpistole
pressure container gun

3300 HSDR

1	10 2919 001	gun body
2	50 3909 005	trigger
3	30 1102 006	trigger axle
4	60 3100 029	clamping ring
5	S 83010	nozzle needle, cpl.
6	60 3104 007	spring f. nozzle needle
7	30 1122 005	stop screw
8	30 1104 008	valve bolt
9	60 4100 027	o-ring 1.5x0.75
10	40 4101 011	valve seal
11	60 3103 003	spring f. valve
12	60 4100 062	o-ring 8x1
13	30 1120 002	locking screw
14	----------	
15	40 4100 003	needle seal, teflon
16	60 4100 064	o-ring 5x1
17	30 1422 016	needle stuffing box
18	60 4100 066	o-ring 8x2.5
19	30 2122 005	spray nozzle
20	20 1413 001	quick coupling
21		Capity hose spray-set
22	60 4100 071	o-ring 15x2
23	40 4104 014	adaptor 3000
25	60 4100 072	o-ring 33x2
26	10 2111 014	pressure tank filler cap
27	60 4100 044	V-packing
28	60 4100 087	o-ring 35x4
29	----------	
30	S 83302	assembly screw
31	60 3129 014	ascending tube
32	S 83305	pressure tank
	S 83303	seal-set
	S 80151	flat-nozzle – plug econnection



CORROSION-RESISTANT COMPOUND CAMPAIGNS
DEALER INFORMATION PACKET

CRC CAMPAIGN AIR EMISSION CALCULATION SUMMARY

Toyota Motor Sales, U.S.A., Inc. (TMS) has prepared this Summary to support its dealers conducting the Corrosion-Resistant Compound ("CRC") campaigns. This Summary explains the calculation of volatile organic compounds (VOCs) and particulate matter (PM) emissions from the CRC campaigns.

I. EXPLANATION OF VOC & PM EMISSION FACTORS

For CRC campaigns, Toyota dealers will use a Vaupel HSDR 3300 spray gun to apply two different CRC materials to the vehicle frame surfaces: (1) Noxudol 300 S (exterior frame surfaces) and (2) 712 AM (interior frame surfaces). Toyota dealers will be supplied with a pre-packaged "kit" that contains exactly the amount of each CRC needed for the vehicle.

The amount of each CRC needed depends upon the vehicle's frame dimensions and openings; due to slight variations among the different makes and model years of vehicles covered by the CRC campaigns, the amount of each CRC applied will not be the same for all vehicles. For the CRC campaigns, Toyota dealers will select among 3 different pre-packaged "kits" (each with different amounts of the CRCs) depending upon the particular make and model year of the vehicle being processed:

- 00289-T00KT-DS -- 0.792 gallons (3 liters) of Noxudol 300 S and 0.264 gallons (1 liter) of 712AM
- 00289-S00KT-DS -- 0.792 gallons (3 liters) of Noxudol 300 S and 0.528 gallons (2 liters) of 712AM
- 00289-T01KT-DS -- 0.528 gallons (2 liters) of Noxudol 300 S and no 712AM

TMS has developed a CRC Campaign Vehicle Production Log (VPL) that dealers can use to document compliance with air permitting requirements by tracking vehicle processing and calculating VOC and PM emissions from the CRC campaigns. As explained below, the VPL incorporates an emissions calculation for each of the three kits that relies on conservative assumptions. Thus, this calculation likely overstates emissions.

A. VOC Emissions

The VPL emissions calculation for VOCs assumes that all of the VOCs contained in Noxudol 300 S (0.09 pounds per gallon) and 712AM (0.165 pounds per gallon)[1] will be emitted to the ambient air during the CRC application process and/or post-application curing. Accordingly, the emission factors used in the VPL calculations account for the total quantity of VOCs in each kit type.

The following table summarizes the VOC emissions calculations for each CRC kit type.

	Kit (Part) #00289-T00KT-DS (3 liters Noxudol, 1 liter 712AM)	**Kit (Part) #00289-S00KT-DS** (3 liters Noxudol, 2 liters 712AM)	**Kit (Part) #00289-T01KT-DS** (2 liters Noxudol, No 712AM)
Noxudol 300 S	0.792 gal (3 liters)/kit x 0.09 lbs VOC/gal **= 0.071 lbs VOC/vehicle**	0.792 gal (3 liters)/kit x 0.09 lbs VOC/gal **= 0.071 lbs VOC/vehicle**	0.528 gal (2 liters)/kit x 0.09 lbs VOC/gal **= 0.048 lbs VOC/vehicle**
712AM	0.264 gal (1 liter)/kit x 0.165 lbs VOC/gal **= 0.044 lbs VOC/vehicle**	0.528 gal (2 liters)/kit x 0.165 lbs VOC/gal **= 0.087 lbs VOC/vehicle**	None
Combined VOC emissions:	**= 0.12 lbs VOC/vehicle**	**= 0.16 lbs VOC/vehicle**	**= 0.05 lbs VOC/vehicle**

B. PM Emissions

The VPL emissions calculation for PM differs from that for VOCs. In particular, both of the CRCs contain solids; however, not all of the solids in the CRCs will be emitted to the ambient air as PM. Instead, two factors will reduce the amount of the solids emitted as PM:

- Some amount of the solids in the CRCs will adhere to the vehicle frame surfaces, and therefore, not be emitted to the ambient air. To determine this amount requires an assessment of the ***transfer efficiency*** of the Vaupel HSDR 3300 spray gun when being used to apply the CRCs.

- Some amount of the solids in the CRCs that do not adhere to the vehicle frame surfaces (*i.e.*, the "overspray") will adhere to other surfaces (*e.g.*, the tarp underneath the vehicle), and therefore, not be emitted to the ambient air. To determine this amount requires an assessment of the percentage of the overspray that will ***fallout*** (and adhere to other surfaces) and not be emitted to the ambient air.

The analysis of these factors for each of the CRCs is summarized below.

- **Noxudol 300 S**: TMS retained Concurrent Technologies Corporation (CTC) to perform two types of testing: (1) Testing to determine the Vaupel HSDR 3300 spray gun's transfer efficiency when being used to apply Noxudol 300 S to the external frame surfaces and (2) Testing to produce data relevant to the amount of the overspray that will fallout, which data were used by another TMS consultant, Environ Corporation (Environ), to determine a "fallout factor". The CTC testing demonstrate that the Vaupel HSDR 3300 spray gun

[1] The VOC content is provided in the manufacturer's Material Safety Data Sheets for Noxudol 300 S and 712AM.

achieves a transfer efficiency of at least 85% when being used to apply Noxudol 300 S to the external frame surfaces. Additionally, after analyzing the results of the CTC testing, Environ calculated a fallout factor of at least 90%, *i.e.*, of the 15% of the Noxudol 300 S that does not adhere to the vehicle frame surfaces (the "overspray"), 90% of that overspray will "fallout" and adhere to other surfaces and not be emitted to the ambient air.

- **712AM**: CTC could not perform similar testing for 712AM due to its application to interior frame surfaces and the closed frame configuration. However, Environ calculated the transfer efficiency based on the dimensions of the limited openings in the otherwise closed portions of the frame. This calculation indicates that the Vaupel HSDR 3300 spray gun achieves at least a 98.5% transfer efficiency when being used to apply 712AM to the interior frame surfaces.[2] Environ also has conservatively assumed a 75% fallout factor.

The PM emissions calculation has 2 steps:

- **Step One**: Use the transfer efficiency to determine the amount of solids that would not adhere to the vehicle frame surfaces, and therefore, would be potentially available for emission to the ambient air as PM; and

- **Step Two**: Use the fallout factor to reduce that amount of solids potentially available for emission, and thereby, determine the estimated actual PM emissions.

The following table summarizes the PM emissions calculations for each CRC kit type based on these 2 steps.

[2] The 98.5% value is the lowest transfer efficiency calculated for all of vehicles subject to CRC campaigns to date. TMS does not anticipate that the transfer efficiency will vary substantially for vehicle models that may be subject to a subsequent CRC campaign or that the impact on the PM emission factors will be significant. More specific information on the transfer efficiency value applicable to any future CRC campaigns will be available at that time.

	Kit (Part) #00289-T00KT-DS (3 liters Noxudol, 1 liter 712AM)	Kit (Part) #00289-S00KT-DS (3 liters Noxudol, 2 liters 712AM)	Kit (Part) #00289-T01KT-DS (2 liters Noxudol, No 712AM)
STEP ONE – Determine amount of solids *potentially* available as PM emissions to ambient air (using transfer efficiency to determine the amount of solids that would not adhere to the vehicle frame surfaces)			
Noxudol	0.792 gal (3 liters)/kit x 7.97 lbs/gal x 98.9% solids by weight x 15% (100% - 85% transfer efficiency) **= 0.94 lbs PM/vehicle**	0.792 gal (3 liters)/kit x 7.97 lbs/gal x 98.9% solids by weight x 15% (100% - 85% transfer efficiency) **= 0.94 lbs PM/vehicle**	0.528 gal (2 liters)/kit x 7.97 lbs/gal x 98.9% solids by weight x 15% (100% - 85% transfer efficiency) **= 0.62 lbs PM/vehicle**
712AM	0.264 gal (1 liter)/kit x 7.885 lbs/gal x 97.9% solids by weight x 1.5% (100% - 98.5% transfer efficiency) **= 0.03 lbs PM/vehicle**	0.528 gal (2 liters)/kit x 7.885 lbs/gal x 97.9% solids by weight x 1.5% (100% - 98.5% transfer efficiency) **= 0.06 lbs PM/vehicle**	None
Combined potential PM emissions:	**= 0.97 lbs PM/vehicle** (solids available for emission to ambient air as PM)	**= 1.0 lbs PM/vehicle** (solids available for emission to ambient air as PM)	**= 0.62 lbs PM/vehicle** (solids available for emission to ambient air as PM)
STEP TWO – Determine Estimated Actual PM Emissions (using fallout factor to adjust (reduce) the amount of solids potentially available for emission)			
Noxudol (90% fallout factor)	0.94 lbs PM/vehicle x 10%	0.94 lbs PM/vehicle x 10%	0.62 lbs PM/vehicle x 10%
712AM (75% fallout factor)	+ 0.03 lbs PM/vehicle x 25%	+ 0.06 lbs PM/vehicle x 25%	--
Estimated PM Emissions:	**= 0.10 lbs PM/vehicle**	**= 0.11 lbs PM/vehicle**	**= 0.06 lbs PM/vehicle**

II. MAXIMUM POTENTIAL EMISSIONS

TMS also has calculated maximum potential emissions resulting from the CRC campaigns based on a conservative, worst-case operating scenario. This scenario reflects the following assumptions:

- A hypothetical "4th type" of vehicle kit that contains more of each CRC than the kits actually being used for the CRC campaigns: 0.792 gallons (3 liters) of Noxudol 300 S and 0.792 gallons (3 liters) of 712AM.
- A one hour vehicle processing time instead of the 2 hour vehicle processing time that TMS has advised its dealers to adhere to for all vehicles across the CRC campaigns.
- A continuous operation in a CRC campaign spray space, 24 hours per day, seven days per week.

Under these assumptions, a dealer could process 8,760 vehicles in any one year using a single spray space.

Actual emissions at any dealership will not come anywhere close to this worst-case operating scenario because dealers are using less CRCs, taking longer to process vehicles and do not engage in 24/7 CRC campaign processing. Nor does this scenario account for state and/or local regulatory limits or permit conditions that prevent dealerships from operating at the maximum scenario. Thus, the emissions calculations summarized below based on this scenario are truly "worst-case".

1. Maximum Operating Scenario – VOC Emissions

The processing of vehicles with this kit (assuming all VOCs contained in the CRCs are emitted to the ambient air) will result in VOC emissions of 0.2 pounds per vehicle (0.792 gals/Noxudol 300 S per kit × 0.09 lbs/VOCs per gal + 0.792 gals/712AM per kit × 0.165 lbs VOCs/gal = 0.2 lbs VOCs/vehicle).

The maximum CRC processing rate, under which one vehicle would be treated per hour over a 24-hour day, would yield no more than 4.8 lbs VOCs per day (0.2 lbs VOCs/vehicle x 24 vehicles/day = 4.8 lbs VOCs/day) or, in the unlikely event a second spray space is used, 9.6 lbs VOCs/day.

Over an annual period, under the maximum annual CRC scenario, a dealer would emit no more than 0.88 tons of VOCs in any one year (8,760 vehicles/year x 0.2 lbs VOCs/vehicle, divided by 2,000 lbs/ton = 0.88 tons VOCs/year) or, if a second spray space is used, 1.76 tons VOCs/year.

2. Maximum Operating Scenario – PM Emissions

Step One: Noxudol has 0.94 pounds of solids per kit potentially available for emission to the ambient air as PM (0.792 gals/kit × 7.97 lbs/gal × 98.9% solids by weight × (100% - 85% transfer efficiency) = 0.94 lbs PM/vehicle); 712AM has 0.09 pounds per kit potentially available (0.792 gals/kit × 7.885 lbs/gallon × 97.9% solids by weight × (100% - 98.5% transfer efficiency) = 0.09 lbs PM/vehicle).

Step Two: Therefore, the hypothetical "4th" kit has 1.03 pounds of solids potentially available for emission to the ambient air as PM. Applying the 90% fallout factor for Noxudol 300 S and the 75% fallout factor for 712AM indicates that actual PM emissions would be no more than 0.12 pounds per vehicle (0.94 x 10% + 0.09 x 25% = 0.12 lbs PM/vehicle).

The maximum CRC processing rate, under which one vehicle would be treated per hour over a 24-hour day, would yield no more than 2.88 lbs PM per day (0.12 lbs/vehicle x 24 vehicles/day = 2.88 lbs PM/day) or, if a second spray space is used, 5.76 lbs PM/day.

Over an annual period, under the maximum annual CRC operating scenario, a dealer would emit no more than 0.53 tons of PM in one year (8,760 vehicles/year x 0.12 lbs/vehicle, divided by 2,000 lbs/ton = 0.53 tons PM/year) or, if two spray spaces are used, 1.06 tons PM/year.

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MARYLAND DEPARTMENT OF THE ENVIRONMENT
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Kathy M. Kinsey
Deputy Secretary

AUG 26 2011

Ms. Julie A. Hatcher
Latham & Watkins LLP
555 Eleventh Street, N.W., Suite 1000
Washington D.C. 20004-1304

Dear Ms. Hatcher:

This letter is in reference to your August 10, 2011 letter submitted on behalf of Toyota Motor Sales, U.S.A., Inc. ("Toyota") requesting a determination of coverage under an air quality permit to construct for Corrosion-Resistant Compound (CRC) coating operations at Toyota dealer locations in Maryland. According to your letter, the CRC coating operations are similar to the temporary Limited Service Campaign operations for Toyota Tacoma model vehicles approved by the Department through December 31, 2011, but will be a permanent addition to Toyota dealer locations for potential use on any Toyota vehicle model.

Under COMAR 26.11.02.10X, sources not subject to any source specific state or federal emission standards and having de minimis levels of emissions of regulated air pollutants are specifically exempt from permit to construct requirements. Based on the following information submitted in your letter, the Department has determined that the CRC coating operations at each Toyota dealer location qualify for the de minimis exemption and are not subject to permit to construct requirements at this time:

(a) Expected emissions of particulate matter, volatile organic compounds (VOC), and toxic air pollutants at each Toyota dealer location meet the criteria for de minimis levels of emissions specified in COMAR 26.11.02.10X;

(b) The CRC coating operations are not subject to a source-specific VOC emission standard for vehicle refinishing under COMAR 26.11.19.23;

(c) Expected emissions of VOC are less than 15 pounds per day per Toyota dealer location, less than the applicability threshold of any other current or proposed source-specific State VOC coating emission standard; and

(d) The CRC coating operations are not subject to any source-specific federal air pollution control regulations.

Please be advised that if the emissions from the CRC coating operations increase or change from what was specified in your letter, you may need to obtain a permit to construct for each affected location. You are encouraged to keep a copy of this letter and monthly records detailing the type and quantity of materials used and hours of operation for the CRC coating operations at each Toyota dealer location. These records will be useful if you are asked at a

future date to identify and quantify emissions of air pollutants from these operations. Finally, these exemptions (1) do not exempt the CRC coating operations at each Toyota dealer location from other applicable regulatory requirements, including state-wide sealant requirements under COMAR 26.11.35; and (2) do not authorize the creation of a nuisance.

A list of Toyota dealer locations covered by this determination and all business confidential information submitted with your request are enclosed with this letter. If you have any questions, please contact Ms. Suna Yi Sariscak of my staff at (410) 537-4129.

Sincerely,

Karen G. Irons, P.E., Administrator
Air Quality Permits Program
Air and Radiation Management Administration

KGI/ss

cc: Suna Yi Sariscak

Enclosures - List of Toyota Dealer Locations
Business Confidential Information

TOYOTA CORROSION-RESISTANT COMPOUND CAMPAIGNS DEALER INFORMATION PACKET

PART TWO – STATE COMPLIANCE SUPPLEMENT FOR MARYLAND

APPENDIX C – SUMMARY OF FEDERAL, STATE AND LOCAL REGULATIONS RELATED TO AIR EMISSIONS FOR MARYLAND

I. INTRODUCTION

The Corrosion Resistant Compound (CRC) campaigns for various models and model years of Toyota vehicles result in emissions of Volatile Organic Compounds (VOCs) and Particulate Matter (PM). Although Toyota Motor Sales, U.S.A., Inc. (TMS) has designed the CRC campaigns to minimize such emissions, the campaigns nevertheless are subject to various federal, state and local regulations related to air emissions. To assist you in making compliance decisions for your dealership, TMS has prepared this summary of federal, state and local regulations related to air emissions in Maryland.

IMPORTANT: You may wish to review this summary before beginning each CRC campaign and in particular whenever you have a need for details, such as, for example, when you are training a new employee who will be involved in the CRC campaigns.

II. AIR PERMITTING

Both federal and Maryland regulations require an air permit for "major" and "minor" sources of VOCs and PM emissions as described below.

1. Major Source

A major source is any source with a potential to emit ("PTE")[1] at or above 100 tons per year ("tpy") for PM and 50 tpy for VOCs, except for sources located in except in Baltimore City and Ann Arundel, Baltimore, Carroll, Cecil, Harford, Howard, Calvert, Charles, Frederick, Montgomery and Prince George's Counties, which are subject to a lower threshold of 25 tpy for VOCs.[2]

TMS has calculated the PTE as well as the expected actual emissions for each prior and ongoing CRC campaign.[3] The PTE for each CRC campaign is just a small fraction of the major

---

[1] "Potential to emit" or "PTE" refers to the maximum capacity of a stationary source to emit air pollutants under its physical and operational design. The PTE calculation generally requires conservative assumptions, and a source's actual emissions are usually well below its PTE.

[2] COMAR § 26.11.02.01(C)(1)(c)(i).

[3] For details on this calculation, see the CRC Campaigns Air Emissions Calculation Summary in Appendix B of the Part Two – State Compliance Supplement for Maryland.

source thresholds. Thus, the CRC campaigns will not, standing alone, cause your dealership to trigger major source air permitting in Maryland.

However, the thresholds for major source air permitting must be applied across your entire dealership and not just to the CRC campaigns. For example, if your dealership's physical plant is distributed across multiple buildings, land parcels or physical locations, then the emissions from your activities at each of those buildings and locations would have to be combined to determine whether your dealership's total emissions fall below major source air permitting levels. In some cases, even emissions from offsite locations that are not physically adjacent to a dealership (such as an offsite body shop) must be combined with the dealership's emissions to make this air permitting determination.

Therefore, operations apart from the CRC campaigns could cause your dealership to trigger major source air permitting. It is not expected, however, that your dealership would do so as long as you satisfy two criteria below:

a. Your dealership does not operate a very large on-site or off-site body shop;[4] and

b. Your dealership does not otherwise engage in significant painting, coating or other spraying operations.

2. Minor Source

In Maryland, minor source permitting generally applies to any new source (or any new air emitting activity at an existing source) (a) that does not constitute a major source and (b) does not qualify for an air permitting exemption.[5] For the CRC campaigns, TMS presented PTE and actual emissions calculations and other information to the Maryland Department of Environment (MDE). Based on this presentation, MDE confirmed on August 26, 2011 that the CRC campaigns qualify for the "*de minimis*" source air permitting exemption[6] because the campaigns:

a. Have a potential to emit below 1 tpy for VOCs and 1 tpy for PM;

b. Do not emit any Class I or Class II toxic air pollutant; and

c. Are "not subject to any source-specific State or federal limitation or emissions standard, including any mass emissions rate limitation,

---

[4] A body shop or other operations that involve the use of spraying equipment will have a higher PTE than a regular vehicle service area. Thus, you cannot be certain – without further analysis – that your dealership will remain exempt from air permitting if it conducts such operations in addition to the CRC campaigns. In particular, if your dealership has an onsite body shop, then the state will require you to combine the PTE from that onsite body shop with the PTE from all other activities at the dealership. In doing so, it may not be possible for your dealership to conduct the CRC campaigns (which would add to the air emissions already coming from your body shop) and remain exempt from air permitting. Moreover, the state might require you to combine the PTE from an offsite body shop – even if the body shop is not where you will conduct the CRC campaigns – if that body shop has a sufficient interconnection to the rest of the activities at your dealership.

[5] COMAR § 26.11.02.01(C)(1)(c)(i).

[6] COMAR § 26.11.02.10X.

pollutant concentration limitation, material formulation standard, equipment performance standard, or work practice standard" given that the CRC campaigns:

i. Have expected actual emissions below 15 pounds per day, and therefore, "below the applicability threshold of any current or proposed source-specific State VOC coating emission standard" and

ii. "are not subject to a source-specific VOC emission standard for vehicle refinishing under COMAR 26.11.19.23."[7]

IMPORTANT: Permitting also can apply to sources that emit substances other than VOCs and PM, such as, for example, sources that emit Hazardous Air Pollutants (HAPS). The CRC campaigns do not emit substances other than VOCs and PM; therefore, this summary does not address permitting or other obligations that may apply based on your dealership's emissions of other substances.

III. VEHICLE REFINISHING OPERATIONS

As noted in MDE's *de minimis* permit exemption determination discussed above in Part II, Maryland has a "vehicle refinishing" regulation at COMAR 26.11.19.23. The regulation has always imposed special requirements on "vehicle refinishing operations" that limit the VOC content of coatings, require the use of high-efficiency coating application systems and impose work practice standards. However, the regulation was substantially revised in 2012 (1) to create a new and more detailed listing of "automotive coating" types with VOC content limits specified for each type; (2) to require MDE's approval of equipment used to spray certain types of coatings as "equivalent" to High Volume, Low Pressure (HVLP) in terms of transfer efficiency; and (3) to impose labeling requirements on coating manufacturers and new recordkeeping requirements on coating users. The revised regulation became effective on July 1, 2013.

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[7] Appendix B of the Part Two – State Compliance Supplement for Maryland contains a copy of MDE's August 26, 2011 permit determination letter that you should keep on file as part of your recordkeeping obligations.

Since MDE issued the August 26, 2011 *de minimis* permit exemption determination, COMAR 26.11.19.23 has been revised to impose new and additional requirements on vehicle refinishing operations as of July 1, 2013. TMS believes that the revised regulation does not impose a "source-specific VOC emissions standard" – and therefore, should not impact MDE's permit exemption determination – for two reasons:

(1) This revised regulation was under development at the time MDE issued the permit exemption determination, and MDE never indicated that if and when the revised regulation became final it would impact the determination.

(2) The CRC materials appear to qualify as "underbody coatings," which are exempt from the revised regulation's coating application method approval requirement; nor does the revised regulation require the use of an emissions control system for the CRC campaigns. The revised regulation, therefore, imposes on the CRC campaigns largely the same type of vehicle refinishing requirements that applied under the former regulation in effect when MDE issued its permit exemption determination (*e.g.*, VOC content limits, work practice standards, etc.).

The CRC materials appear to qualify as "underbody coatings" under the revised regulation.[8] The VOC content of the CRC materials falls well below the limit established in the revised regulation for "underbody coatings." Moreover, the revised regulation exempts equipment used to apply "underbody coatings" from the requirement to obtain MDE's approval, and therefore, no such approval is necessary for the Vaupel HSDR 3300 spray guns used to apply the CRC materials.

The revised regulation imposes requirements for the handling and storage of the CRC materials[9] and for training;[10] the specifics of these obligations are addressed in Part Two (Steps One & Two) and in Appendix B of the State Compliance Supplement for Maryland. In addition, the revised regulation requires your dealership to maintain certain records for the CRC materials as well as any other "automotive coatings" in use by your dealership. These new requirements are listed below as they appear in the revised regulation. TMS recommends that you review them carefully and make sure that your dealership has a compliance system in place, not just for the CRC campaigns, but across your dealership:

> Record-Keeping Requirements for Coatings, Coating Components and Solvents. A person who uses automotive coatings, automotive coating components, ready-to-spray coatings (based on the manufacturer's stated mix ratio), or cleaning solvents subject to this regulation shall maintain and have available at all times, the following:
>
> (a) A current list of all coatings, coating components and cleaning solvents used that are subject to this regulation which includes the following information for each coating, coating component and cleaning solvent:
>
> (i) Whether the material is a coating, coating component, or cleaning solvent;
>
> (ii) Coating, coating component or cleaning solvent name and manufacturer;
>
> (iii) Application method;
>
> (iv) Coating type;
>
> (v) The mix ratio specific to the coating, coating component or cleaning solvent; and
>
> (vi) The VOC actual content and VOC regulatory content as applied, for each ready to spray or ready to apply coating or cleaning solvent and copies of data sheets documenting how the as applied values were determined;
>
> (b) The VOC actual content and VOC regulatory content as supplied and copies of current manufacturer specification sheets, product data sheets, material safety data sheets, technical data sheets, or air quality data sheets documenting the as supplied value; and
>
> (c) Purchase records identifying the following;
>
> (i) The coating type;
>
> (ii) Coating, coating component, or cleaning solvent name; and

[8] TMS has not confirmed this understanding of the revised regulations with MDE, but plans to do so in the future.

[9] COMAR § 26.11.19.23(H).

[10] COMAR § 26.11.19.23(H)(2)(d).

(iii) Volume purchased of the coating, coating component or cleaning solvent.[11]

IMPORTANT: Your dealership may engage in other vehicle refinishing operations besides the CRC campaigns which also are subject to these requirements. This Summary does not address these requirements as applied to non-CRC materials and non-CRC campaign activities.

IV. PARTICULATE MATTER EMISSIONS LIMITS

Maryland regulations require sources to limit hourly emissions of PM. Under the regulations, an allowable PM emissions rate must be developed for each type of process using a "process weight rate" formula.

The process weight rate for the CRC campaigns is a function of the amount of CRCs sprayed and the time it takes to spray them during processing of a vehicle. Due to the variation in amounts and application times as between CRC campaigns, the process weight rate – and therefore the applicable allowable PM emissions rate – will vary for each CRC campaign.

For each CRC campaign, TMS calculates both (1) the allowable PM emissions rate (using the process weight rate formula) and (2) the hourly PM emissions expected if the campaign is conducted in accordance with the Technical Instructions. TMS then compares (1) and (2) to make sure that each CRC campaign will fall below the allowable PM emissions rate applicable to it.

The calculation of hourly PM emissions for each CRC campaign incorporates assumptions regarding how long it will take you to process a vehicle. If you were to process a vehicle in a shorter amount of time, then your actual hourly PM emissions could be higher and might not fall below the allowable PM emissions rate.

To assure compliance with the allowable PM emissions rate, your dealership should not process more than 1 vehicle every 2 hours. The Part One – Guide for Compliance to the CRC Campaigns Dealer Information Packet discusses that vehicle processing limit and provides guidance in dealership Appendix A on how to follow the limit. Appendix C of the Part Two – State Compliance Supplement for Maryland includes a "CRC Campaign Vehicle Production Log" that your dealership should use to document dealership adherence to this limit.

V. RECORDKEEPING

Your dealership should maintain records to demonstrate your compliance with the requirements discussed in Parts II and III above and your adherence to the vehicle processing limit discussed in Part IV above. Please refer to Appendix B to the Part Two – State Compliance Supplement for Maryland for logs that you can use and for copies of documents to retain on file.

It is important that your dealership maintain the foregoing records for an appropriate period of time. While your dealership can make dealership own compliance decisions, ***it is recommended that you retain the above documents and all completed logs until 5 years after your dealership ceases dealership involvement in CRC campaigns***.

[11] COMAR 26.11.19.23(J).

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