



TO: TOYOTA OF BRISTOL AND KINGSPORT DEALER PRINCIPALS, SERVICE MANAGERS AND PARTS MANAGERS

DATE: 2011

RE: Information Packet for Corrosion-Resistant Compound (CRC) Campaign B0D

TUNDRA CORROSION-RESISTANT COMPOUND CAMPAIGN B0D

**TENNESSEE/VIRGINIA DEALER INFORMATION PACKET
(FOR TENNESSEE DEALERS SERVICING
VIRGINIA-REGISTERED TUNDRAS)**

This bound volume contains two parts of the Tennessee/Virginia Dealer Information Packet for the Tundra **Corrosion-Resistant Compound (CRC)** Campaign B0D—the **Getting Started Guide** and the **Guide to Federal, State and Local Requirements**. The third part—the **Technical Instructions**—is bound separately.

IMPORTANT NOTE: The Tundra B0D (described in this **Dealer Information Packet** and the **Technical Instructions** that accompany it) covers Toyota Tundra trucks registered in CT, DE, IL, IN, KY, MA, MD, ME, MI, MN, NH, NJ, NY, OH, PA, RI, VA, VT, WI, and WV. You are receiving this Packet because we understand that due to your dealership's proximity to Virginia, a substantial number of Tundras registered in Virginia are serviced at your dealership. This Campaign **ONLY** covers those **B0D-eligible vehicles** serviced at your dealership that are **REGISTERED IN VIRGINIA**.

IMPORTANT – PLEASE READ

(This page intentionally left blank.)

TABLE OF CONTENTS

	<u>Page</u>
TENNESSEE/VIRGINIA DEALER INFORMATION PACKET	3
GETTING STARTED GUIDE.....	5
STEP 1: SITE SELECTION	5
STEP 2: AIR PERMITTING EXEMPTION	6
STEP 3: CONTACT LOCAL FIRE OFFICIAL	7
STEP 4: COMPLETE B0D READINESS SURVEY	8
STEP 5: AIR RECORDKEEPING	8
STEP 6: HAZARDOUS WASTE MANAGEMENT	9
HOW TO IMPLEMENT THE B0D	11
SITE SELECTION SECTION	13
GUIDE TO FEDERAL, STATE AND LOCAL REQUIREMENTS.....	17
AIR REGULATIONS SECTION	21
AIR PERMITTING REQUIREMENTS: ARE YOU EXEMPT	21
AIR REGULATORY REQUIREMENTS: UNDERSTANDING HOW THEY WILL APPLY TO YOUR DEALERSHIP	23
AIR REGULATORY REQUIREMENTS: YOUR RECORDKEEPING OBLIGATIONS.....	26
AIR RECORDKEEPING SECTION	29
FIRE, BUILDING AND ZONING CODES SECTION	77
TABLE 1: CODE SUMMARY FOR TENNESSEE LOCATIONS	83
APPENDIX A: NFPA COMPLIANCE MATERIALS.....	85
APPENDIX A1: NFPA FIRE CODE SUMMARY	87
APPENDIX A2: NFPA MODEL LETTER	89
HAZARDOUS WASTE MANAGEMENT SECTION.....	115

(This page intentionally left blank.)



TO: TOYOTA OF BRISTOL AND KINGSPORT DEALER PRINCIPALS, SERVICE MANAGERS AND PARTS MANAGERS

DATE: 2011

RE: Information Packet for Tundra Corrosion-Resistant Compound Campaign B0D

**TUNDRA CORROSION-RESISTANT COMPOUND CAMPAIGN B0D
(FOR TENNESSEE DEALERS SERVICING
VIRGINIA-REGISTERED TUNDRAS)**

TENNESSEE/VIRGINIA DEALER INFORMATION PACKET

Toyota is launching a Corrosion-Resistant Compound (CRC) Campaign for 2000-2003 model year (MY) Tundra vehicles registered in certain cold climate states with high road salt use ("Cold Climate States"). This Campaign consists of two components:

- (1) The next phase of Safety Recall 90M announced in November 2009 affecting the rear portion of the frame. Under this next phase, owners of covered vehicles will receive a CRC application to the rear portion of the frame as part of the remedy for the identified condition.
- (2) A Customer Satisfaction Program to address the potential for greater than expected levels of corrosion to the front portion of the frame in these vehicles.

For ease of reference only, this Dealer Information Packet will refer to the entire CRC Campaign for the 2000-2003 MY Tundras by the internal designation assigned to this next phase of Safety Recall 90M – "B0D".

This Dealer Information Packet will help you prepare for and conduct the Tundra B0D by addressing federal, state and local laws that apply to spray application of CRCs. Your dealership should already be familiar with these laws and with the format of this Packet as a result of conducting the Tacoma Limited Service Campaign (LSC) 90D.

For the Tundra B0D, you will also be using the Vaupel HSDR 3300 spray gun to apply two CRCs to the interior and exterior of the frame:

- **Frame Internal Surfaces:** The interior CRC for the Tundra B0D will be the same 712AM material being used for the Tacoma LSC 90D, and you will be using the same Vaupel HSDR 3300 issued to you for LSC 90D.
- **Frame External Surfaces:** The exterior CRC for the Tundra B0D will not be X128T (now being used in Tacoma LSC 90D), but a different material known as "Noxudol 300 S". You will be issued one additional Vaupel HSDR 3300 to apply the Noxudol 300 S for the Tundra B0D.

As with the Tacoma LSC 90D, the Tundra B0D CRCs contain Volatile Organic Compounds

IMPORTANT – PLEASE READ

(VOCs), Particulate Matter (PM) and other substances that are subject to federal, state and/or local laws related to ***air emissions, fire code approval, waste generation and recordkeeping***. However, Noxudol 300 S contains lower VOCs than X128T and is a Class IIIB, instead of a Class II, liquid. As a result, the Tundra B0D will pose different -- and generally less stringent -- compliance obligations under federal, state and/or local laws. Your dealership will be able to ***comply with these laws without significant burdens on your business*** as long as you follow the steps discussed in this Packet. Therefore, please review this entire Information Packet with your service and parts staff ***BEFORE*** you begin conducting the B0D.

This Packet consists of three parts, contained in two bound booklets:

1. **“GETTING STARTED GUIDE”**: **Gets you started by reviewing the steps your dealership needs to take to comply with federal, state and local laws.**
2. **“GUIDE TO FEDERAL, STATE AND LOCAL REQUIREMENTS”**: **Reviews in more detail relevant federal, state and local laws. Also provides compliance tools.**
3. **“TECHNICAL INSTRUCTIONS”**: **Contains detailed technical instructions that you should follow at all times.**

IMPORTANT

Use Same Spray Space for LSC 90D and B0D: Toyota is advising its dealers to conduct the Tundra B0D in the same spray space now being used to conduct the Tacoma LSC 90D. **If you are not able to use the existing Tacoma LSC 90D spray space for the Tundra B0D, then your compliance obligations may be different than what is covered in this Packet.** Therefore, in the event you are not able (or believe you might not be able) to use the existing LSC 90D spray space, please call the C.L.E.A.N. Dealer EH&S Hotline at (877) 572-4347 immediately to discuss your particular situation.

Notify Your Local Fire Code Enforcement Official: Your dealership should have applied for and already obtained approval from your local fire code enforcement official to conduct the Tacoma LSC 90D. **You will need to notify your local fire code enforcement official that you plan to conduct the Tundra B0D in the same spray space as LSC 90D.** This Packet provides information to help you provide such notification.

If you are not able to use the Tacoma LSC 90D spray space for the Tundra B0D, then you will need to identify an appropriate spray space for the Tundra B0D and then you will need to contact your local fire code enforcement official for approval. If you are facing this situation, you also may wish to seek approval from your local fire code enforcement official to re-locate your LSC 90D spray space so that you can use the same space for both campaigns. Before proceeding, please call the C.L.E.A.N. Dealer EH&S Hotline at (877) 572-4347 to discuss your particular situation.

**TUNDRA CORROSION-RESISTANT COMPOUND CAMPAIGN B0D
TENNESSEE/VIRGINIA DEALER INFORMATION PACKET
(FOR TENNESSEE DEALERS SERVICING VIRGINIA-REGISTERED TUNDRAS)**

GETTING STARTED GUIDE

***Where Will You Conduct The B0D?** This **Getting Started Guide** assumes that you will conduct the Tundra B0D in the same spray space currently being used to conduct the Tacoma LSC 90D. If you are unable to do so, please call the C.L.E.A.N. Dealer EH&S Hotline (877-572-4347), for assistance.*

PLEASE READ THIS GETTING STARTED GUIDE CAREFULLY SO THAT YOU UNDERSTAND THE STEPS YOUR DEALERSHIP SHOULD TAKE TO COMPLY WITH THE APPLICABLE LEGAL REQUIREMENTS:

- **BEFORE** beginning the Tundra B0D (see **Steps 1, 2, 3 and 4** below); and
- **WHILE** conducting the Tundra B0D (see **Steps 5 and 6** below).

IMPORTANT NOTE: The Tundra B0D (described in this **Dealer Information Packet** and the **Technical Instructions** that accompany it) covers Toyota Tundra trucks registered in CT, DE, IL, IN, KY, MA, MD, ME, MI, MN, NH, NJ, NY, OH, PA, RI, VA, VT, WI, and WV. You are receiving this Packet because we understand that due to your dealership's proximity to Virginia, a substantial number of Tundras registered in that state are serviced at your dealership. This Campaign **ONLY** covers those **vehicles** serviced at your dealership that are **REGISTERED IN VIRGINIA**.

STEP 1 – BEFORE YOU BEGIN APPLYING TUNDRA B0D CRCs, PLEASE CONFIRM THAT YOUR SPRAY SPACE IS APPROPRIATE

To ensure that the Tundra B0D is conducted in compliance with all applicable regulatory requirements, you need to ensure that the existing CRC spraying space for the Tacoma LSC 90D meets certain minimum requirements, and if so, then notify the appropriate fire code enforcement official that you intend to use this space for the Tundra B0D. Your existing spray space for Tacoma LSC 90D should meet regulatory requirements if it is large enough and has a lift that will accommodate a Tundra. If you cannot use the existing LSC 90D spray space for the Tundra B0D, you will need to establish a new spray space and contact your local fire code enforcement official for approval. If you are facing this situation, *please call the C.L.E.A.N. Dealer EH&S Hotline (877-572-4347) for assistance.* Go to the Site Selection Section for more information. If you are facing this situation, *please call the C.L.E.A.N. Dealer EH&S Hotline (877-572-4347) for assistance.*

Go to the Site Selection Section for more information.

IMPORTANT – PLEASE READ

STEP 2 – BEFORE APPLYING THE TUNDRA B0D CRCs, CONFIRM THAT YOUR DEALERSHIP CAN CONDUCT B0D CONCURRENTLY WITH THE TACOMA LSC 90D WITHOUT TRIGGERING AIR PERMITTING REQUIREMENTS

Do You Already Have An Air Permit? *If your dealership already has an air permit, then you may need to obtain a modification to that permit before proceeding with the Tundra B0D. If you have an air permit, please stop reading this Information Packet and go to the C.L.E.A.N. Dealer website (<http://cleandealer.com>), or call the EH&S Hotline (877-572-4347), for assistance.*

The B0D CRC materials contain Volatile Organic Compounds (VOCs), Particulate Matter (PM) and other substances subject to federal and state air quality laws. Generally, these laws allow emissions up to a certain level and require a facility, if it wishes to exceed that level, to obtain an air permit from the state.

We assume that your dealership is currently exempt from air permitting. Your dealership can conduct the Tundra B0D and remain exempt from air permitting so long as:

(1) Your Potential to Emit (PTE) for the Tundra B0D for any air contaminant does not exceed 5 tons per year (tpy) (The “Insignificant Activity” Exemption).

- a. **Toyota of Bristol:** Your B0D PTE for all air contaminants combined is 0.07 tons, well below the 5 tpy limit. (See the Air Recordkeeping Section.)
- b. **Toyota of Kingsport:** Your B0D PTE for all air contaminants combined is 0.04 tons, well below the 5 tpy limit. (See the Air Recordkeeping Section.)

Note: The PTE is calculated solely on Tundra Vehicles in your PMA that are registered in Virginia.

(2) 30 days before you intend to start the Tundra B0D, you must send a notification to the Tennessee Air Pollution Control Board (TAPCB) requesting its determination that the B0D is an “insignificant activity”. You MAY NOT start the Tundra B0D until you receive a written response from TAPCB confirming that the B0D is an insignificant activity.

For more information and a form of notification for you to submit to TAPCB, please go to the Air Regulations Section and Air Recordkeeping Section. **If you cannot satisfy the criteria noted above, please go to C.L.E.A.N. Dealer website (<http://cleandealer.com>) or call the EH&S Hotline (877-572-4347) for more information.**

How Can I Learn More? Please see the **Air Regulations Section** of the Guide to Federal, State and Local Requirements for a full discussion of air permitting requirements and the **Air Recordkeeping Section** of the Guide to Federal, State and Local Requirements for tools that your dealership can use to assure compliance.

STEP 3 – BEFORE YOU BEGIN APPLYING THE TUNDRA B0D CRCs, (1) CONTACT THE APPROPRIATE FIRE CODE ENFORCEMENT OFFICIAL TO NOTIFY HIM/HER OF YOUR INTENTION TO CONDUCT THE TUNDRA B0D IN THE SAME SPRAY SPACE BEING USED FOR THE TACOMA LSC 90D; AND (2) MAKE SURE THAT YOUR DEALERSHIP CAN CONDUCT THE TUNDRA B0D IN COMPLIANCE WITH FIRE, BUILDING AND ZONING CODES

The B0D CRCs are Class IIIB combustible materials. State and local fire codes apply to the use of combustible materials. Building and zoning codes also may apply.

Your dealership can make its own choices about how best to comply with these codes. To assist you, however, we have prepared a detailed review of these requirements for your reference, which can be found in the **Fire, Building and Zoning Codes Section** of the **Federal, State and Local Requirements Guide**. You should be able to satisfy these requirements as long as you:

1. **NOTIFY YOUR LOCAL FIRE CODE ENFORCEMENT OFFICIAL IN WRITING, OF YOUR INTENTION TO CONDUCT TUNDRA B0D IN THE SAME SPACE BEING USED FOR TACOMA LSC 90D.**

What Do I Need To Give My Local Fire Code Enforcement Official? Appendix A to the **Fire, Building and Zoning Codes Section** contains all of the materials that you will need to give to your local fire code enforcement official, except **that you will need to add some information about the spray space location at your dealership.**

YOU MUST SEND THESE MATERIALS BEFORE CONDUCTING THE TUNDRA B0D.

2. **CONFIRM THAT YOU CAN CONDUCT THE TUNDRA B0D IN COMPLIANCE WITH BUILDING, ZONING AND FIRE CODE REQUIREMENTS.**

How Do I Confirm Compliance With Building, Zoning and Fire Code Requirements? The Fire, Building and Zoning Codes Section provides a detailed review of these requirements and includes a Table 1 that allows you to look up the city or county where you will conduct the B0D and see whether it has any additional requirements applicable to the B0D.

STEP 4 – COMPLETE THE B0D READINESS SURVEY

You must complete the **B0D Readiness Survey** available at the C.L.E.A.N. Dealer website (<http://cleandealer.com>) to confirm your readiness to start the B0D. Toyota will then automatically ship one additional Vaupel HSDR 3300 spray gun (for the Noxudol 300 S material) to you at no charge.

After We Complete Steps 1, 2, 3, and 4 Can We Start the B0D CRC application?

Yes, **BUT** make sure to follow:

- The detailed **Technical Instructions for the Tundra B0D**, and
- Step 5 (compliance with hourly Allowable PM Emissions Rate and air permitting exemption records), and
- Step 6 (comply with hazardous waste requirements). You should also review the **Guide to Federal, State and Local Requirements** to better understand the legal requirements for Steps 1, 2, 3, and 4.

STEP 5 – COMPLY WITH HOURLY ALLOWABLE PM EMISSIONS RATES AND KEEP AIR REGULATORY COMPLIANCE RECORDS

To ensure compliance with hourly Allowable PM Emissions Rates applicable to the Tundra and Tacoma processes, **you should NOT process a total of more than one Tundra every 2 hours and more than one Tacoma every 1 hour.** Also, you will be required to maintain records in your dealership's files showing that you are exempt from the air permitting and are complying with air regulations.

Tennessee regulations impose an allowable hourly emissions rate for particulate matter (PM) on each process. Due to differences in the external CRC being used and in the spray application times, Tundra B0D and LSC 90D do not have the same hourly Allowable PM Emissions Rate, and therefore, the number of vehicles that can be processed per hour varies between the two programs.

Tundra B0D: The Allowable PM Emissions Rate for the Tundra B0D process is 0.076 pounds per hour. As long as your dealership conducts the Tundra B0D in accordance with the Technical Instructions, the B0D should have PM emissions of no more than 0.047

pounds per hour, and therefore, will fall below this Allowable PM Emissions Rate. However, this PM emissions level of 0.047 pounds per hour assumes it will take roughly 2 hours to apply both CRCs (*i.e.*, 712AM and Noxudol 300 S) to a Tundra; if a Tundra were processed in a shorter amount of time, then the hourly PM emissions rate could be higher. Thus, to ensure compliance with the 0.076 pounds per hour Allowable PM Emissions Rate, ***your dealership should not process more than one Tundra every 2 hours.***

Tacoma LSC 90D: The Allowable PM Emissions Rate for the 90D process is 0.12 pounds per hour. As long as your dealership conducts the Tacoma 90D in accordance with the Technical Instructions, the 90D should have PM emissions of no more than 0.068 pounds per hour, and therefore, will fall below this Allowable PM Emissions Rate.¹ However, this potential PM emissions level of 0.068 pounds per hour assumes it will take roughly 1 hour to apply both CRCs (*i.e.*, 712AM and X128T) to the Tacoma; if a Tacoma were processed in a shorter amount of time, then the hourly PM emissions rate could be higher. Thus, to ensure compliance with the 0.12 pounds per hour Allowable PM Emissions Rate, ***your dealership should not process more than one Tacoma every 1 hour.***

Record Keeping: You will be required to maintain records in your dealership's files showing that you qualify for the Insignificant Activity Exemption (discussed in Step 2 above) and are complying with air regulations. The Air Recordkeeping Section of the **Guide to Federal, State and Local Requirements** has instructions regarding the records that you must retain in relation to a determination that the B0D is exempt from permitting requirements.

STEP 6 – COMPLY WITH HAZARDOUS WASTE REQUIREMENTS

You will need proper procedures in place for distinguishing between B0D-only and combined LSC 90D/B0D waste.

The B0D spray guns (for use with Noxudol 300 S and 712AM) do not need to be cleaned and the B0D materials are not “hazardous waste” when discarded. Therefore, the B0D will not generate hazardous waste and it should not impact your dealership's waste generator status (*e.g.*, whether you are a Small Quantity Generator or a Conditionally Exempt Small Quantity Generator of hazardous waste).

However, as described in your Tacoma LSC 90D Dealer Information Packet, one of the materials used in the LSC 90D – X128T – could be hazardous waste when discarded. As a result, the LSC 90D Dealer Information Packet advises that: 1) if you frequently dispose of the tarps (*e.g.* floor coverings) and/or the partition materials used in your LSC 90D work

¹ Since sending the Tacoma LSC 90D Dealer Information Package in 2009, TMS has adopted a more conservative approach to calculating the allowable PM emissions rate. Only the revised emission rates are presented here. Under either calculation you should be in compliance with this requirement if you process no more than one Tacoma per hour.

area, you will generate a larger quantity of waste, which may impact your generator status; and 2) you should manage any excess quantities of the LSC 90D materials and/or rags used to clean up any LSC 90D materials in the same manner as other hazardous waste at your dealership.

If, as we assume, you conduct the B0D in the same work area as the LSC 90D, any discarded floor tarps, partitions or other items used to clean up the common work area (e.g. rags) may contain X128T and should therefore be managed as hazardous waste. However, any materials used ONLY in the B0D, such as the plastic sheet secured to the Tundra frame when applying 712AM, should not need to be managed as hazardous waste so long as they contain no X128T waste. You should develop a waste handling procedure suitable to your operation that will ensure LSC 90D waste and combined LSC 90D/B0D waste are managed as hazardous waste.

HOW TO IMPLEMENT THE B0D

Step 1: Confirm that your existing Tacoma LSC 90D spray space is an appropriate spray space for Tundra B0D.

Toyota is advising its dealers to **conduct the Tundra B0D in their existing Tacoma LSC 90D spray space**. If you cannot use this existing spray space for B0D, please call the C.L.E.A.N. Dealer EH&S Hotline at (877) 572-4347 to discuss your particular situation.

Step 2: Make sure you can conduct the Tundra B0D concurrently with the Tacoma LSC 90D without triggering air permitting requirements.

Your dealership will be exempt from air permitting requirements if its PTE for the Tundra B0D for each air contaminant is less than 5 tpy. For this exemption to apply, **at least 30 days** before you intend to start the Tundra B0D, **you must send a notification** to the Tennessee Air Pollution Control Board (TAPCB) requesting that it designate the B0D as an "insignificant activity". **You MAY NOT start the B0D until you receive a written response from TAPCB confirming that the B0D is an insignificant activity.**

Step 3: Notify Your Local Fire Official in Writing of Your Intention to Conduct the Tundra B0D in the Same Spray Space Being Used For the Tacoma LSC 90D, and Confirm Your Compliance with Building and Zoning Code Requirements.

See Fire, Building and Zoning Codes Section of this Packet for compliance and contact information.

Step 4: Complete the B0D Readiness Survey

Please **complete the B0D Readiness Survey** available at the C.L.E.A.N. Dealer website (<http://cleandealer.com>) to confirm your readiness to start the B0D. Toyota will then automatically ship one additional Vaupel HSDR 3300 spray gun (for the Noxudol 300 material) to you at no charge.

AFTER COMPLETING STEPS 1, 2, 3 & 4 YOU CAN START APPLYING B0D MATERIALS

But you must **follow the Technical Instructions** and Steps 5 & 6 below.

Step 5: Comply with Hourly PM Emissions Rates and Keep Air Regulatory Compliance Records

To ensure compliance with hourly Allowable PM Emissions Rates applicable to the Tundra and Tacoma processes, **you should NOT process a total of more than one Tundra every 2 hours and more than one Tacoma every 1 hour**. Also, comply with the requirements in the Air Recordkeeping Section of this Packet to document that you are exempt from air permitting and are complying with air regulations.

IMPORTANT – PLEASE READ

Step 6: Comply with Hazardous Waste Requirements

Unlike Tacoma LSC 90D, Tundra B0D will not generate hazardous waste. Therefore, items used exclusively for B0D – such as plastic sheeting suspended from the front portion of the frame while applying 712 AM – will not, when discarded, need to be managed as hazardous waste. However, the LSC 90D does generate hazardous waste, and therefore, items being used for both the LSC 90D and B0D – such as floor tarps and clean up rags – will need, when discarded, to be managed as hazardous waste. Please continue to follow the instructions provided in the LSC 90D Dealer Information Packet for managing hazardous waste. Also, you will need proper procedures in place for distinguishing between B0D-only and combined LSC 90D/B0D waste.

The steps outlined above should help you ensure that your dealership conducts the B0D in compliance with the relevant federal, state and local legal requirements. You should use this **Getting Started Guide** along with the other parts of the B0D Dealer Information Packet – the **Guide to Federal, State and Local Requirements** and the **Technical Instructions**.

This Information Packet is not intended to cover other air, waste management, hazardous material, water or other environmental laws and regulations that might apply to non-B0D operations at your dealership. We assume that you already comply with other environmental, health and safety requirements that apply to your facility.

If you have any questions after reviewing this information or as you proceed, 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 Tundra Corrosion-Resistant Compound Campaign B0D.

Thank you for your cooperation.
TOYOTA MOTOR SALES, U.S.A., INC.

**TUNDRA CORROSION-RESISTANT COMPOUND CAMPAIGN B0D
TENNESSEE/VIRGINIA DEALER INFORMATION PACKET
(FOR TENNESSEE DEALERS SERVICING VIRGINIA-REGISTERED TUNDRAS)**

SITE SELECTION SECTION

Please carefully review the entire Dealer Information Packet – including this Site Selection Section – with your Service and Parts Staff.

Various state and local codes, such as, as one example, the local fire code, impose operational limitations on the Tundra B0D, including on the location where you may conduct it.

- If you conduct the B0D in the spray space already being used for the Tacoma LSC 90D, then this location should satisfy these state and local codes for the B0D.
- If not, however, then you will need to select a proper location to conduct the B0D. This Site Selection Section is designed to help you do so.

If you will use the same spray space, then you can skip the Site Selection Section.

If for some reason you cannot use the existing LSC 90D spray space for B0D, you will need to establish a new spray space. This spray space would have to meet the site selection criteria set forth below. Before selecting a new spray space and contacting the appropriate fire code enforcement official, please call the C.L.E.A.N. Dealer EH&S Hotline (877-572-4347) to discuss your particular situation.

SITE SELECTION CONSIDERATIONS

(If you are NOT able to use the existing LSC 90D Spray Space for the Tundra B0D)

1) B0D WORK AREA MUST COMPLY WITH BUILDING, MECHANICAL AND ZONING REQUIREMENTS (e.g., has a certificate of occupancy).

Your B0D work area should be located in an existing building/service area that complies with building/zoning/mechanical requirements. The B0D **may not** take place outdoors.

Note: The information in this Packet is not intended to cover building, zoning, mechanical or other environmental or occupational health and safety laws and regulations that might apply to non-B0D operations at your dealership. We assume that you already have systems in place to comply with any other environmental, health and safety requirements that apply to your dealership.

IMPORTANT – PLEASE READ

2) **YOUR B0D WORK AREA MUST HAVE ALL OF THE FOLLOWING:**

- a) **Adequate ventilation** (whether natural or mechanical);
Consideration should be given to: (1) locations/stalls near bay doors, other natural ventilation and/or areas with approved mechanical ventilation, and (2) where possible, locations at the end of a row of service bays and not in the middle.
- b) **Be at least 20 feet from:** (1) open flames and/or spark-producing equipment and appliances; and (2) any drying, curing, and/or fusion apparatus;
- c) The B0D work area must be located away from pits or other below-ground areas;
- d) The B0D work area must have a **suitable lift** that allows clear access to the vehicle's frame rails.
- e) The floor of the B0D work area must be covered by an approved, noncombustible, nonsparking, **fire retardant material**.
- f) **Fire extinguishers rated “B,” “AB,” or “ABC”** must be provided **within 30'** (even if the work area has an automatic fire protection system);²
- g) **Compressed air**;
- h) **Eyewash stations**;
- i) **Drop lights appropriate for use during the spraying of combustible liquids**;

3) **Any other equipment**, operational and/or building features **required by applicable law** or indicated in the **Material Safety Data Sheets (MSDSs)** for the B0D materials.

4) **ALL B0D WORK SHOULD BE CONDUCTED IN A PARTITION ENCLOSURE** such as those depicted in the **Technical Instructions**, which separates the B0D from other vehicles and work areas/stalls. We assume you will use the same enclosure used to conduct the Tacoma LSC 90D, so long as it is large enough to fit a Tundra.

To prevent the possible accumulation of combustible vapors, the partition enclosures depicted in the Technical Instructions should have sufficient open space (at least one foot) (12”) at the bottom of the partition to allow for ventilation. In certain spray spaces, such as an end bay space, it may be appropriate to use a partition enclosure with only three sides and to leave the fourth side open (against the end wall), thereby increasing ventilation in the work area.

²

A fire extinguisher should be in the vicinity even if the B0D work area has an automatic fire protection system (e.g., sprinklers).

OTHER REQUIREMENTS TO CONSIDER

Other Legal Requirements

The B0D is subject to other federal, state and/or local laws and codes related to air emissions, fire code approval, waste generation and recordkeeping that impose other operational limitations on it. **Therefore, in addition to this Section you should carefully review the Technical Instructions and the rest of this Guide** (e.g., the Air Regulations, Fire, Building and Zoning, and Hazardous Waste Management Sections).

B0D Material Storage

You may not store more than 25 gallons of combustible materials (including the B0D materials) in any fire area at your dealership. A fire area is any area in your dealership separated from the remainder of the building by construction and openings that have fire resistance ratings of at least 1 hour. *You may only exceed this 25 gallon limit if the materials are stored in a fire cabinet. If you are using a fire cabinet you may store up to 120 gallons in any one cabinet and have up to 3 cabinets in any one fire area at your dealership.*

* * * * *

(This page intentionally left blank.)



TO: TOYOTA OF BRISTOL AND KINGSPORT DEALER PRINCIPALS, SERVICE MANAGERS AND PARTS MANAGERS

**TUNDRA CORROSION-RESISTANT COMPOUND CAMPAIGN B0D
TENNESSEE/VIRGINIA DEALER INFORMATION PACKET
(FOR TENNESSEE DEALERS SERVICING VIRGINIA-REGISTERED TUNDRAS)**

GUIDE TO FEDERAL, STATE AND LOCAL REQUIREMENTS

***Please review the entire Dealer Information Packet
-- including this Guide to Federal, State and Local Requirements --
with your Service and Parts staff.***

For the Tundra B0D, you will be using the same kind of spray gun – the Vaupel HSDR 3300 spray gun – as is being for Tacoma LSC 90D, to apply two CRCs to the interior and exterior of the frame.

- The interior CRC for B0D will be the same 712AM material being used for the Tacoma LSC 90D, and you will use the same Vaupel HSDR 3300 issued to you for LSC 90D to apply the 712AM to Tundra internal frame surfaces for the B0D.
- The exterior CRC for B0D will be a material known as “Noxudol 300 S”. You will be issued one additional Vaupel HSDR 3300 to apply the Noxudol 300 S for B0D.

Air emissions will occur during your application of these materials. Under these circumstances the following federal, state and local legal requirements will apply to the B0D:

- Air Quality Under Tennessee Department of Environment & Conservation (TDEC) Regulations and
- Spraying & Storage of Combustible Liquids Under State and Local Fire, Building, and Zoning Codes.

We assume that you will use the same spray space for the Tacoma LSC 90D and the Tundra B0D and that you will use the existing LSC 90D spray space for both campaigns. If for some reason the existing LSC 90D spray space will not work for the B0D, you must relocate the spray space before contacting your local fire code enforcement official for approval, but before doing so, please call the C.L.E.A.N. Dealer EH&S Hotline at (877) 572-4347 to discuss your particular situation.

IMPORTANT – PLEASE READ

The **Getting Started Guide** in the Dealer Information Packet provides a step-by-step overview of how to conduct the B0D so that your dealership will comply with these kinds of legal requirements. After you have reviewed the **Getting Started Guide** to familiarize yourself with these requirements, you should review this **Guide to Federal, State and Local Requirements**, which provides a more detailed discussion of these requirements and contains information and forms that you will need to comply with them.

This **Guide** has been organized with separate sections that address each of these kinds of legal requirements. These sections are labeled by topic so that you can easily review the information now and find the information later should questions arise when you are conducting the B0D. *Important pages that you must read are marked in red on the edge of the page. If you need additional information, you may refer to the other pages.*

This Guide to Federal, State and Local Requirements contains the following Sections:

1. **“AIR REGULATIONS” SECTION**

- c. The Air Regulations Section provides a detailed review of federal and state laws that will regulate air emissions from the Tundra B0D at your dealership. In general, these laws allow air emissions up to a certain level and require a facility, if it wishes to exceed that level, to request permission from the state through an air permitting process.
- d. We assume that your dealership currently has air emissions below air permitting levels, and therefore, is currently exempt from air permitting requirements. You should review the Air Regulations Section carefully to make sure that your dealership can conduct the B0D concurrently with the Tacoma LSC 90D and stay exempt from air permitting. As explained in that section, you can conduct the Tundra B0D and continue to stay exempt from air permitting if you comply with the requirements below:

- (1) **For Toyota of Bristol and Toyota of Kingsport:** The B0D must qualify as an “insignificant activity,” which means the potential to emit (PTE) for each air contaminant from the B0D must not exceed 5 tons per year (tpy). As explained in the Air Regulations Section, the PTE for all air contaminants from the B0D are well below this limit.
- (2) At least 30 days before you intend to start the B0D, you must send a notification to the Tennessee Air Pollution Control Board (TAPCB) requesting that it designate the B0D as an insignificant activity. You **MAY NOT** start the B0D until you receive a written response from TAPCB confirming that the B0D is an insignificant activity.

- e. If you will not be able to stay exempt from air permitting, or if you already have an air permit, please go to the C.L.E.A.N. Dealer website (<http://cleandealer.com>) or call the EH&S Hotline (877-572-4347) for more information

2. **“AIR RECORDKEEPING” SECTION**

The Air Recordkeeping Section contains the documents and records your dealership must maintain to comply with applicable record retention and availability requirements required by the Tennessee Air Pollution Control Board, in relation to a determination that the B0D is exempt from permitting requirements because it is an “insignificant activity.”

3. **“FIRE, BUILDING, AND ZONING CODES” SECTION**

- a. **The Fire, Building, and Zoning Codes Section reviews state and local fire, building, and zoning codes. In general, these codes apply due to the combustibility of the two B0D CRCs. You should review all of the information carefully to make sure that your dealership can conduct the B0D in compliance with these codes.**
- b. **IMPORTANT:** As explained at the Fire, Building, and Zoning Codes Section, prior to implementing the B0D, your dealership will need to contact your local fire code enforcement official in order to:
 - (1) Notify him/her that you plan to conduct the Tundra B0D in the same spray space as Tacoma LSC 90D.
- c. The Fire, Building, and Zoning Codes Section contains a letter and all of the technical information that you will need to provide to your local fire code enforcement official, except that you will need to add some information about the location at your dealership where you will conduct the B0D. If you have any questions or concerns relating to discussions with your local fire code enforcement official, please go to the C.L.E.A.N. Dealer website (<http://cleandealer.com>) or call the EH&S Hotline (877-572-4347) for assistance.

4. **“HAZARDOUS WASTE MANAGEMENT” SECTION**

- a. **The Hazardous Waste Management Section reviews the requirements that apply to hazardous wastes generated by your dealership generally. Please note that there are differences between B0D and LSC 90D wastes.**
- b. The materials used in the Tundra B0D – 712AM and Noxudol 300 S – are not considered “hazardous” waste when they are discarded. In addition, as is the case for the Tacoma LSC 90D, the Vaupel HSDR 3300 spray guns being used for B0D do not need to be cleaned as long as you follow the procedures in the Technical

Instructions for proper storage of the guns. Therefore, the B0D should not generate any hazardous waste and any items used exclusively for performing the B0D – such as the plastic sheet suspended from the frame or the plastic bags used to cover the brake assemblies during spraying – do not, when discarded, need to be managed as hazardous waste. Such B0D-exclusive waste will not count toward your monthly hazardous waste generation totals.

However, one of the materials used in the Tacoma LSC 90D – X128T – may be considered a hazardous waste when discarded due to its combustibility. Therefore, if, as we assume, the B0D will occur in the same spray space as the Tacoma LSC 90D, there may be common materials, such as floor tarps and rags used for cleanup, that if discarded will need to be managed as hazardous waste. Such materials will count toward your monthly waste generation totals and may impact your generator status. You should develop a procedure for your dealership to identify LSC 90D and joint LSC 90D/B0D waste as distinguished from B0D-only waste.

* * * * *

This **Guide to Federal, State and Local Requirements** is not intended to cover air, waste management, hazardous material, water or other environmental laws and regulations that might apply to non-LSC 90D operations at your dealership. We assume that you already have systems in place to comply with any other environmental, health and safety requirements that apply to your dealership.

If you have any questions after reviewing this information or as you proceed, please go to the C.L.E.A.N. Dealer website (<http://cleandealer.com>) or call the EH&S Hotline (877-572-4347) for assistance.

Thank you for your participation and cooperation in the Tundra Corrosion-Resistant Compound Campaign B0D.

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

**TUNDRA CORROSION-RESISTANT COMPOUND CAMPAIGN B0D
TENNESSEE/VIRGINIA DEALER INFORMATION PACKET
(FOR TENNESSEE DEALERS SERVICING VIRGINIA-REGISTERED TUNDRAS)**

GUIDE TO FEDERAL, STATE AND LOCAL REQUIREMENTS

AIR REGULATIONS SECTION

Do You Already Have A Major Source Air Permit? *If Yes, or if emissions from your operations approach 100 tpy of any regulated air pollutant, then you may need a major source permit or permit modification before conducting the B0D. If you have an air permit, please stop reading this Air Regulations Section and go to the C.L.E.A.N. Dealer website (<http://cleandealer.com>) or call the EH&S Hotline (877-572-4347) for assistance.*

I. AIR PERMITTING REQUIREMENTS: ARE YOU EXEMPT?

The B0D Corrosion-Resistant Compounds contain Volatile Organic Compounds (VOCs), and Particulate Matter (PM). These substances are subject to limits on emissions to air under federal and state laws. These laws allow air emissions up to a certain level. If a facility wishes to exceed that level, then it must obtain an air permit from the state.

Important: Air Emission Limits Apply To Your Entire Dealership. *The air permitting laws apply based on total emissions from an entire facility and not just from a particular building or location. For example, if your dealership's physical plant is distributed across multiple buildings, land parcels or physical locations, then the air emissions from all of those buildings and locations would have to be combined to determine whether the dealership's total air emissions are below 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.*

We assume that your dealership currently has air emissions below air permitting levels, and therefore, is currently exempt from air permitting. Your dealership can make its own choices about how best to conduct the B0D and stay exempt from air permitting. However, your dealership should be able to conduct the B0D and stay exempt from air permitting laws if you satisfy **1 through 4** below.

YOUR DEALERSHIP SHOULD NOT NEED AN AIR PERMIT IF:

(1) YOUR POTENTIAL TO EMIT (PTE) FOR THE B0D FOR ANY AIR CONTAMINANT DOES NOT EXCEED 5 TONS PER YEAR (TPY) (THE “INSIGNIFICANT ACTIVITY” EXEMPTION).³

(a) Toyota of Bristol: Your B0D PTE for all air contaminants combined is 0.07 tons, well below the 5 TPY limit. (See the Air Recordkeeping Section).

(b) Toyota of Kingsport: Your B0D PTE for all air contaminants combined is 0.04 tons, well below the 5 TPY limit. (See the Air Recordkeeping Section).

Note: The PTE is calculated solely on Tundra vehicles in your PMA that are registered in Virginia.

(2) 30 DAYS BEFORE YOU INTEND TO START THE B0D, YOU MUST SEND A NOTIFICATION TO THE TENNESSEE AIR POLLUTION CONTROL BOARD (TAPCB) REQUESTING THAT IT DESIGNATE THE B0D AS AN INSIGNIFICANT ACTIVITY. YOU MAY NOT START THE B0D UNTIL YOU RECEIVE A WRITTEN RESPONSE FROM TAPCB CONFIRMING THAT THE B0D IS AN INSIGNIFICANT ACTIVITY.

(3) YOUR DEALERSHIP DOES NOT HAVE AN ONSITE OR AN OFFSITE BODY SHOP.

Why Does It Matter If I Have A Body Shop? The state requires air emissions from your entire dealership to be combined to determine whether your dealership has air emissions below air permitting levels. Because a body shop will have higher air emissions than a regular vehicle service area, you can not be certain -- without further analysis -- that your dealership will remain exempt from air permitting after adding the B0D to its operations.

In particular, if your dealership has an onsite body shop, then the state will require you to combine the emissions from that onsite body shop with the emissions from all other activities at the dealership. In doing so, it may not be possible for your dealership to conduct the B0D (which would add to the air emissions already coming from your body shop) and stay exempt from air permitting. Moreover, the state might require you to combine emissions from an offsite body shop -- even if the body shop is not where you will conduct the B0D -- if that body shop has a sufficient interconnection to the rest of the activities at your dealership.

If your dealership has an onsite or an offsite body shop, please go to the C.L.E.A.N. Dealer website (<http://cleandealer.com>) or call the EH&S Hotline (877-572-4347) for assistance.

³

The 5 tpy permit exception threshold applies only to the PTE for the B0D and not from other activities or emissions units at your dealership.

(4) YOUR DEALERSHIP WILL CONDUCT THE B0D IN AN EXISTING SERVICE AREA.

Do I Have to Conduct the B0D in an Existing Service Area? No, but if you plan to conduct the B0D in another area (such as in an offsite body shop) or in another state, then you may not be able to stay exempt from air permitting and/or you may be subject to different requirements. As noted elsewhere in this Packet, we assume you will conduct the B0D in the same work area as the Tacoma LSC 90D. If the common B0D-LSC 90D spray space is not in an existing service area at your dealership, or you plan to conduct the B0D at an off-site location, please go to the C.L.E.A.N. Dealer website (<http://cleandealer.com>) or call the EH&S Hotline (877-572-4347) for more information.

How Can I Learn More About How These Air Permitting Exemption Requirements Will Apply To My Dealership? The discussion in Section II below provides further explanation of the air permitting exemption requirements. You should review it carefully to ensure that you understand the basis for these requirements and how they will apply to your dealership.

EVEN IF YOUR DEALERSHIP DOES NOT NEED AN AIR PERMIT, YOU MUST SATISFY OTHER AIR REGULATORY REQUIREMENTS:

- A. Comply with hourly PM Allowable Emissions Rates of 0.076 pounds per hour (Tundra B0D) and 0.12 pounds per hour (Tacoma LSC 90D) by limiting your hourly processing of:

1. TUNDRAS TO NO MORE THAN ONE TRUCK EVERY 2 HOURS AND
2. TACOMAS TO NO MORE THAN ONE TRUCK EVERY 1 HOUR.

II. AIR REGULATORY REQUIREMENTS: UNDERSTANDING HOW THEY WILL APPLY TO YOUR DEALERSHIP

1. Requirements To Qualify As Exempt from Air Permitting

a. Potential to Emit (PTE) for Each Regulated Air Contaminant from the B0D

- (1) The B0D qualifies as an insignificant activity in Tennessee because its potential to emit (PTE) for each air contaminant is less than 5 tpy, and therefore is exempt from Tennessee air permitting requirements unless the B0D, when combined with your dealership's other operations, would cause your dealership's PTE to exceed the "major source" thresholds for VOCs (100 tpy).
- (2) Your dealership MAY NOT start the B0D under this exemption until you have (i) sent a notification for designation of the B0D as an "insignificant activity" to the TAPCB, and (ii) received a

response from TAPCB confirming that the BOD is exempt from permitting.

b. **Potential To Emit (PTE) for VOCs: Stay Below 100 tpy “Major Source” Threshold**

- (1) Potential VOC emissions from all activities (both BOD and non-BOD) at your dealership must be less than 100 tpy to stay exempt from air permitting. Because the BOD has **potential** VOC emissions of less than 1 tpy based on the theoretical maximum number of Virginia-registered Tundras that could be treated at both Toyota of Bristol and Toyota of Kingsport, this means that all other activities at your dealership must not have combined potential VOC emissions greater than ~ 99 tpy.
- (2) Your dealership’s current PTE should be well below 99 tpy as long as you do not have substantial spraying operations similar to the BOD and/or use very large quantities of VOC-containing materials (i.e., in excess of 18,000 gallons per year). Should questions arise regarding the PTE of the BOD, the Air Recordkeeping Section of this Guide contains documents that provide the PTE calculations for the BOD. You should keep these documents in your files, but will not need to do anything with them unless requested to do so by the Tennessee Department of Environment & Conservation (TDEC). If you have any questions or concerns regarding your ability to meet this limit, please go to the C.L.E.A.N. Dealer website (<http://cleandealer.com>) or call the EH&S Hotline (877-572-4347).

c. **Potential to Emit (PTE) for Particulate Matter (PM): Stay Below 100 Tons Per Year:**

- (1) Potential PM emissions from all activities (both BOD and non-BOD) at your dealership must be less than 100 tpy to stay exempt from air permitting. Because the BOD has **potential** PM emissions of less than 1 tpy based on the theoretical maximum number of Virginia-registered Tundras that could be treated at both Toyota of Bristol and Toyota of Kingsport, this means that all other activities at your dealership must not have combined potential PM emissions greater than ~ 99 tpy.
- (2) Your dealership’s current PTE should be well below 99 tpy as long as you do not have substantial spraying operations similar to the BOD and/or use very large quantities of PM-containing materials. Should questions arise regarding the PTE of the BOD, the Air Recordkeeping Section of this Guide contains documents that provide the PTE calculations for the BOD. You should keep these documents in your files, but will not need to do anything with them

unless requested to do so by the Tennessee Department of Environment & Conservation (TDEC). If you have any questions or concerns regarding your ability to meet this limit, please go to the C.L.E.A.N. Dealer website (<http://cleandealer.com>) or call the EH&S Hotline (877-572-4347).

d. **Hazardous Air Pollutants:**

- (1) The B0D materials do not contain and will not emit hazardous air pollutants (HAPs), and therefore, do not trigger any requirements related to HAPs.

To Qualify as Exempt from Air Permitting, Do I Have to Consider My Entire Dealership's Operations or Only Operations at the Place Where I Will Conduct the B0D? Please remember that the air permitting exemption requirements cover YOUR ENTIRE DEALERSHIP and NOT just any buildings or locations where you will apply the LSC 90D and B0D materials. For example, if your dealership's physical plant is distributed across multiple buildings, land parcels or physical locations, all of those buildings and locations would be subject to the requirements identified above (e.g., the 100 TPY major source threshold for VOCs discussed above applies to all materials used anywhere at your dealership).

2. **Requirements To Limit Hourly Particulate Matter (PM) Emissions**

- a. Tennessee regulations impose an hourly allowable emissions rate for particulate matter (PM) on certain types of processes. This rate is calculated for each individual process based on a formula that requires determining the Process Weight Rate for the individual process and then multiplying a fraction of that Process Weight Rate by 3.59.
- b. Due to differences in the external CRC being used and in the spray application times, the Tundra B0D and the Tacoma LSC 90D do not have the same hourly Allowable PM Emissions Rate, and therefore, the number of vehicles that can be processed per hour varies between the two programs.
- c. **Tundra B0D: Do Not Process More Than One Tundra Every 2 Hours**
 - (1) In the case of the B0D, the Allowable PM Emissions Rate is 0.076 pounds per hour. As long as your dealership conducts the B0D in accordance with the **Technical Instructions**, the B0D should have PM emissions of no more than 0.047 pounds per hour, and therefore, will fall below this Allowable PM Emissions Rate.
 - (2) However, this PM emissions level of 0.047 pounds per hour assumes it will take roughly 2 hours to apply both CRCs (i.e., 712AM and Noxudol 300 S) to the Tundra. If a Tundra were

processed in a shorter amount of time, then the hourly PM emissions rate could be higher.

- (3) Thus, to ensure compliance with this Allowable PM Emissions Rate, ***your dealership should not process more than one Tundra every 2 hours.***

d. **Tacoma LSC 90D: Do Not Process More Than One Tacoma Every 1 Hour**

- (1) As discussed in the Tacoma LSC 90D Dealer Information Packet, the Allowable PM Emissions Rate for the 90D process is 0.12 pounds per hour. As long as your dealership conducts the Tacoma 90D in accordance with the Technical Instructions, the 90D should have potential PM emissions of 0.068 pounds per hour, and therefore, will fall below this Allowable PM Emissions Rate.⁴
- (2) However, this potential PM emissions level of 0.068 pounds per hour assumes it will take roughly 1 hour to apply both CRCs (*i.e.*, 712AM and X128T) to the Tacoma. If a Tacoma were processed in a shorter amount of time, then the hourly PM emissions rate could be higher.
- (3) Thus, to ensure compliance with this Allowable PM Emissions Rate, ***your dealership should not process more than one Tacoma every 1 hour.***

If 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) for assistance.

III. AIR REGULATORY REQUIREMENTS: YOUR RECORDKEEPING OBLIGATIONS

Your dealership must maintain certain records to demonstrate that you are exempt from air permitting. **You must keep these records at your dealership for five (5) years beyond the date that you service the last Tundra under the B0D.**

The Air Recordkeeping Section contains documents that you can use to demonstrate that you are exempt from air permitting requirements because the B0D is an “insignificant activity” as defined by the Tennessee Air Pollution Control Board, in the event any questions are raised. These records include:

- 1) The Notification for Designation of the B0D as an “Insignificant Activity” as submitted to the Technical Secretary of the Tennessee Air Pollution Control Board, including all attachments; and

⁴ Since sending the Tacoma LSC 90D Dealer Information Package in 2009, TMS has adopted a more conservative approach to calculating the allowable PM emissions rate. Only the revised emission rates are presented here. Under either calculation you should be in compliance with this requirement if you process no more than one Tacoma per hour.

- 2) The Determination of Agreement regarding Designation of the B0D as an “Insignificant Activity” as received from the Technical Secretary of the Tennessee Air Pollution Control Board; and
- 3) Information Documenting the B0D’s Potential-to-Emit; and
- 4) California South Coast Air Quality Management District’s (“SCAQMD”) determination that the Vaupel HSDR 3300 Spray Guns for the B0D are equivalent to High Volume Low Pressure Application Equipment; and
- 5) B0D Equipment Manufacturer’s Specifications; and
- 6) Material Safety Data Sheets for the B0D materials (NOTE: These should also be maintained with your other MSDSs, in compliance with OSHA requirements).

You must keep the records noted above on file at your dealership for a period of five (5) years from the completion of the B0D.

(This page intentionally left blank.)

**TUNDRA CORROSION-RESISTANT COMPOUND CAMPAIGN B0D
TENNESSEE/VIRGINIA DEALER INFORMATION PACKET
(FOR TENNESSEE DEALERS SERVICING VIRGINIA-REGISTERED TUNDRAS)**

GUIDE TO FEDERAL, STATE AND LOCAL REQUIREMENTS

AIR RECORDKEEPING SECTION

IMPORTANT: Please maintain these documents in your dealership's records for a period of five (5) years after the date that you spray the last Tundra under the B0D.

Your dealership must maintain the documents and records listed below to comply with applicable record retention and availability requirements required by the Tennessee Air Pollution Control Board, in relation to a determination that the B0D is exempt from permitting requirements because it is an “insignificant activity.” You must maintain the following records for five (5) years from the completion of the B0D:

1. The Notification for Designation of the B0D as an “Insignificant Activity” as submitted to the Technical Secretary of the Tennessee Air Pollution Control Board, including all attachments. *Instructions for completing and submitting the notification are included in this Section; and*
2. The Determination of Agreement regarding Designation of the B0D as an “Insignificant Activity” as received from the Technical Secretary of the Tennessee Air Pollution Control Board; and
3. Information Documenting the B0D's Potential-to-Emit; and
4. A Brief Written Process Overview of the B0D; and
5. B0D Equipment Manufacturer's Specifications; and
6. Material Safety Data Sheets for the B0D materials. (NOTE: These should also be maintained with your other MSDSs, in compliance with OSHA requirements.); and
7. California South Coast Air Quality Management District's (“SCAQMD”) determination that the Vaupel HSDR 3300 Spray Guns for the B0D are equivalent to High Volume Low Pressure Application Equipment.

You do not need to do anything with the items above, with the exception of submitting the Notification for Designation and receiving a Determination of Agreement. You should keep these documents in your files. You may need to provide them if requested by a government agency.

(This page intentionally left blank.)

**Instructions for Submission of the Notification for Designation of the B0D as an
“Insignificant Activity”**

1. Your dealership **must not begin** the B0D until you:
 - a. Submit the attached “Notification for Designation of the B0D as an Insignificant Activity” to the Technical Secretary of the Tennessee Air Pollution Control Board (“TAPCB”); and
 - b. Receive a “Determination of Agreement” from the Technical Secretary of the TAPCB that the B0D is an insignificant activity.
2. Your dealership must submit the Notification for Designation **at least 30 days** before the estimated starting date of the B0D. **You may not start the B0D until you receive a response from the TAPCB.**

3. **Preparing the Notification For Designation**

Please go to the C.L.E.A.N Dealer website-(<http://cleandealer.com>) for electronic copies of the Notification for Designation letter and its attachments.

- a. Put the Notification for Designation on your dealership’s letterhead.
- b. Insert the proper date.
- c. Add the “Introduction, Overview and Air Emissions Calculations” document located in this **Air Recordkeeping Section** to the Notification at Attachment 1.
- d. Add the “Tundra B0D Process Overview” document located in this **Air Recordkeeping Section** to the Notification at Attachment 2.
- e. Add the B0D Material MSDSs located in this **Air Recordkeeping Section** to the Notification at Attachment 3.
- f. Add the Manufacturer’s Specifications for the Vaupel HSDR 3300 located in this **Air Recordkeeping Section** to the Notification at Attachment 4.
- g. Have the Notification of Designation signed by your dealership’s General Manager.

4. Send the Notification of Designation to:

Technical Secretary
Tennessee Air Pollution Control Board
9th Floor, L&C Annex
401 Church Street
Nashville, TN 37243

Attention: John Trimmer

5. Keep a copy of the "Notification of Designation", including all attachments, in your files.
6. Once you receive the Determination of Agreement from the Technical Secretary of the Tennessee Air Pollution Control Board that the BOD is an insignificant activity, keep a copy of this Determination in your files.

[insert dealership letterhead]

August __, 2011

Technical Secretary
Tennessee Air Pollution Control Board
9th Floor, L&C Annex
401 Church Street
Nashville, TN 37243

Attention: John Trimmer

Re: **Notification for Designation as “Insignificant Activity” Pursuant to TENN. COMP. R. & REGS. 1200-03-09.04(4)(a) for Toyota Corrosion-Resistant Compound Campaign B0D**

Dear Technical Secretary:

Toyota of Kingsport submits this written notification, pursuant to TENN. COMP. R. & REGS. 1200-03-09.04(4)(a), in connection with a Toyota Corrosion-Resistant Compound Campaign B0D (“Tundra B0D”) that we would like to conduct at our dealership facility. We are seeking a determination of agreement from the Technical Secretary that the Tundra B0D – which involves a finite number of vehicles and has a theoretical “worst case” potential to emit (PTE) of less than 1 ton per year– qualifies as an “insignificant activity”. This campaign will be similar to the Tacoma Limited Service Campaign (“LSC”) that your office determined qualified as an “insignificant activity” by letter dated August 4, 2009.

This notification attaches the following supporting documents with details on the Tundra B0D:

1. Attachment 1: “Toyota Campaigns to Address Frame Corrosion for Certain Vehicles Operated in Virginia and Serviced by Tennessee Toyota Dealerships - Introduction, Process Overview and Air Emissions Calculations”
2. Attachment 2: Tundra B0D Process Overview.
3. Attachment 3: MSDS for two sealants to be applied to vehicle frame rails with Vaupel HSDR 3300 spray guns -- Parker 712AM and Noxudol 300 S.
4. Attachment 4: Manufacturer’s Specifications for Vaupel HSDR 3300 spray gun.

We provide a brief explanation below on the background of the Tundra B0D and the reasons that it qualifies as an insignificant activity.

I. BACKGROUND ON THE TUNDRA CORROSION-RESISTANT COMPOUND CAMPAIGN (“TUNDRA B0D”)

Toyota is now launching a Corrosion-Resistant Compound (CRC) Campaign for 2000-2003 model year (MY) Tundra vehicles registered in certain cold climate states with high road salt use. The Tundra B0D will consist of two components: (1) the next phase of Safety Recall 90M announced in November 2009 affecting the rear portion of Tundra frames in which owners of covered vehicles will

receive a CRC application to the rear portion of the frame as part of the remedy for the identified condition; and (2) a customer satisfaction program to address the potential for greater than expected levels of corrosion to the front portion of Tundra frames in these same vehicles.

Virginia, but not Tennessee, is one of the cold climate, high road salt states that will be participating in the Tundra BOD. However, Toyota of Kingsport would like to participate in the Tundra BOD to accommodate our customers resident in Virginia for whom we are their nearest Toyota dealer. We are planning to begin conducting the Tundra BOD 30 days after submitting this notification.

Although the Tundra BOD is currently limited to 2000-2003 MY Tundras, additional 2004-2008 MYs are being evaluated for a possible future CRC customer satisfaction program. Consequently, Toyota has calculated the PTE figures in this letter and its attachments based on Tundra Units in Operation ("UIO") for MYs 2000-2008 to ensure that this PTE conservatively represents the maximum potential emissions for application of CRCs to all Tundras that may ultimately be covered by the current and potential future campaigns. We respectfully request that your determination that the program qualifies as an "insignificant activity" apply to both the current Tundra BOD for 2000-2003 MY Tundras as well as any future CRC campaigns covering 2004-2008 MY Tundras.

The same material that was applied to the internal frame surfaces of Tacoma trucks under the LSC will be used and applied in the same manner on the internal frame surfaces of Tundra trucks under the Tundra BOD. This CRC – "712AM"¹ -- is a paraffin wax-based material that contains 0.165 lbs. VOC/gal, but no hazardous air pollutants ("HAPs").² The Tundra's external frame surfaces will be treated using a new corrosion-resistant compound material – "Noxudol 300 S" – in lieu of the Nox-Rust X128T ("X128T") used in the LSC. Noxudol 300 S has a VOC content of 0.09 pounds per gallon (10.7 g/L), which is markedly lower than X128T's VOC content of 3.5 pounds per gallon, and likewise contains no HAPs.³

Toyota has structured the Tundra BOD in a manner that will inherently limit both actual and potential air emissions on a per-dealer basis. Toyota will supply dealers with one additional Vaupel HSDR 3300 spray gun to apply the Noxudol 300 S. Each dealer will have only one Vaupel HSDR 3300 spray gun for application of each CRC. Toyota also will supply dealers with individual vehicle "kits" that contain only the quantity of each sealant needed for one vehicle eligible for service under the Tundra BOD, as well as detailed technical instructions and regulatory compliance information.

As explained in Attachment 1, proper application of these sealants cannot be achieved with a traditional high volume, low pressure (HVLP) spray device, necessitating use of the specialized Vaupel HSDR 3300. Notably, testing and other information demonstrates the Vaupel HSDR 3300's high transfer efficiency when applying the Tundra BOD materials, and its use will ensure that emissions from the Tundra BOD remain low on a per-truck and per-dealer basis.

¹ This material used to be manufactured by Parker Industries under license from Daubert Chemical Company, Inc. under the trade name "Nox-Rust 712AM." It now is manufactured by Parker Industries independently under the trade name "712AM."

² See, Attachment 3: Parker Industries MSDS for 712AM (indicating a VOC content of 0.165 lbs/gal).

³ See, Attachment 3: Auson AB MSDS for Noxudol 300 S (indicating VOC content of 10.7 g/L which converts to 0.09 pounds per gallon).

II. THE TUNDRA B0D IS AN “INSIGNIFICANT ACTIVITY” PURSUANT TO RULE 1200-03-09.04(4)(A)

Toyota of Kingsport seeks a determination of agreement from the Technical Secretary that the Tundra B0D is an “insignificant activity” (or “insignificant emissions unit”) on the grounds that its potential to emit for both VOCs and PM is less than 5 tons per year (“tpy”). We understand that Tennessee’s air regulations require permits prior to the construction (or modification) and operation of any air contaminant source, except where specifically exempted per Rule 1200-03-09.04.⁴ Rule 1200-03-09.04(4)(a) creates such an exemption for “insignificant activities” or “insignificant emissions units.”

Under this exemption, insignificant activities are defined as any activity or emissions unit that has PTE less than: (1) 5 tpy of each air contaminant and each regulated air pollutant that is not a HAP; and (2) 1,000 pounds per year of each HAP.⁵ The Tundra B0D clearly meet this definition: As explained in Attachment 1, the Tundra B0D’s PTE for all air contaminants combined is less than 1 tpy; the Tundra B0D will emit no HAPs.

III. CONCLUSION

Toyota of Kingsport believes that the information presented above and attached to this letter demonstrates that the Tundra B0D satisfies the criteria for an “insignificant activity” (or “insignificant emissions unit”) under Rule 1200-03-09-.04(4)(a) and is therefore exempt from Tennessee’s construction and operating air permit requirements. With this notification, we respectfully request a determination of agreement from the Technical Secretary supporting this conclusion.

As previously stated, we also request that your determination that the program qualifies as an “insignificant activity” apply not only to the current Tundra B0D covering MY 2000-2003 Tundra trucks, but also to potential CRC campaigns involving MY 2004-2008 Tundra trucks, which are currently being considered for future campaigns.

We appreciate your prompt attention to this matter. If you have any questions about Toyota of Kingsport’s participation in the Tundra B0D, please do not hesitate to contact me at [phone number]. If you would like more information about the Tundra B0D generally and the information contained in Attachments 1 thru 4, you may also contact Ms. Sandra Waddell, Managing Counsel for Environmental, Health and Safety matters at Toyota, at (310) 468-4830.

Sincerely,

[Contact at Toyota of Kingsport]

Attachments

⁴ TENN. COMP. R. & REGS. 1200-03-09.01(1)(a); 1200-03-09.02(2).

⁵ *Id.* 1200-03-09.04(4)(b).

(This page intentionally left blank.)

**ATTACHMENT 1: TOYOTA CAMPAIGNS TO ADDRESS FRAME CORROSION FOR CERTAIN
VEHICLES OPERATED IN VIRGINIA AND SERVICED BY TENNESSEE
TOYOTA DEALERSHIPS**

INTRODUCTION, PROCESS OVERVIEW AND AIR EMISSIONS CALCULATIONS

(This page intentionally left blank.)

ATTACHMENT 2: TUNDRA B0D PROCESS OVERVIEW

(This page intentionally left blank.)

ATTACHMENT 3: MSDSs for B0D Sealants

(This page intentionally left blank.)

ATTACHMENT 4: Manufacturer's Specifications for Vaupel HSD

(This page intentionally left blank.)

**TOYOTA CAMPAIGNS TO ADDRESS FRAME CORROSION
FOR CERTAIN VEHICLES OPERATED IN VIRGINIA AND
SERVICED BY TENNESSEE TOYOTA DEALERSHIPS**

INTRODUCTION, OVERVIEW AND AIR EMISSIONS CALCULATIONS

I. EXECUTIVE SUMMARY

Toyota has received reports indicating that the frames of certain Toyota vehicles operated in cold climate areas with high road salt use may experience greater than expected rust corrosion. This condition, when present, is distinct from the rust commonly found on metallic surfaces after some years of usage and/or outdoor exposure.

Toyota originally identified the potential for this condition to be present in certain model years of Tacoma trucks and developed a dealer-based, corrosion-resistant compound application limited service campaign to address it. This campaign – known as the “Tacoma LSC 90D” – has been offered to owners resident in 20 states and the District of Columbia, including Virginia.¹ Due to their proximity to Virginia, two Tennessee dealerships – Toyota of Bristol and Toyota of Kingsport – participated in the Tacoma LSC 90D to accommodate Toyota’s customers in Virginia for whom these were the nearest dealerships. As described in previous submissions to the Tennessee Air Pollution Control Board (APCB), the Tacoma LSC 90D entails the application by a Toyota dealer of two corrosion resistant compounds (CRCs) to the vehicle’s frame rails – one to the interior frame rail surfaces and one to the exterior frame rail surfaces – with a specialized Vaupel HSDR 3300 spray gun.

Toyota dealers have been conducting the Tacoma LSC 90D in Tennessee since August 2009, based on a formal determination from APCB that the Tacoma LSC 90D operations constitute an insignificant activity or insignificant emissions unit, as defined in Rule 1200-3-9-.04(2)(a)(3) of the Tennessee Air Pollution Control Regulations, and are thus not subject to air permitting pursuant to Rule 1200-3-9.04(4)(a). Phase I of the Tacoma LSC 90D, covering model years (MY) 2001-2004, ended in Tennessee on March 31, 2011. Phase II of the Tacoma LSC 90D, covering MY 1996-2000, is scheduled to conclude on December 31, 2011.

Toyota is now planning a second campaign to address frame corrosion for certain model years of Tundra trucks. This second campaign – which is being referred to as “Tundra B0D” – differs from Tacoma LSC 90D in that it stems, in part, from a voluntary safety recall under the auspices of the National Highway Traffic Safety Administration (NHTSA). This recall involves the rear portion of the frame on MY 2000-2003 Tundra trucks. Under B0D, Toyota dealers will apply CRCs not only to the rear cross member portion of the frame of vehicles covered by the recall, but also for a limited time to the front portion, even though not required as part of the safety recall, as an additional customer satisfaction measure. In addition, Toyota is now evaluating possible future CRC customer service campaigns relating to MY 2004-2008 Tundra trucks and other vehicle models besides Tundra.

Since launching the Tacoma LSC 90D, Toyota has been working to identify a different exterior CRC with adequate anti-corrosion-resistant functionality, but with a lower VOC content and

¹ The 20 states in addition to the District of Columbia are: Connecticut; Delaware; Illinois; Indiana; Kentucky; Maryland; Maine; Massachusetts; Michigan; Minnesota; New Hampshire; New Jersey; New York; Ohio; Pennsylvania; Rhode Island; Vermont; Virginia; West Virginia; Wisconsin.

lower combustibility rating than the exterior CRC being used for the LSC 90D. Toyota has identified an alternative exterior CRC – with a Class IIIB combustibility rating and a much lower VOC content², but still with no hazardous air pollutants, SOx, NOx, or lead – and now plans to use that exterior CRC for Tundra B0D, along with the same interior CRC now being used for Tacoma LSC 90D. As a result of this exterior CRC substitution, the air emissions associated with the Tundra B0D will be *significantly lower* – on both a per truck and potential to emit (PTE) basis – than the Tacoma LSC 90D. Potential future CRC campaigns would use this same lower-VOC, less-combustible exterior CRC material, and would, therefore, have a low emissions profile similar to that of the Tundra B0D.

A conservative emissions calculation based on the number of vehicles that might³ be covered by Tundra B0D at Toyota of Kingsport indicates a maximum, per dealer PTE of 0.04 tons of VOCs and 0.03 tons of PM. The per truck emissions also are very low: 0.11 pounds of VOCs and 0.10 pounds of PM.

Other factors will assure inherently low emissions: Toyota is instructing its dealers to conduct the Tundra B0D in the same space now being used for the Tacoma LSC 90D, which means that during the period between now and December 31, 2011 when the campaigns overlap, a dealer will not simultaneously spray a Tacoma and a Tundra vehicle. Toyota also will issue only one additional spray gun for each dealer to apply the alternative exterior CRC and will instruct its dealers to use the same spray gun being used now for the Tacoma LSC 90D to apply the interior CRC. As with the Tacoma LSC 90D, dealers will receive the CRCs for the Tundra B0D in “kits” that contain the amount of the exterior and interior CRCs needed for application to a single vehicle.

Toyota believes that the information contained in this submission provides ample basis for APCB to make a formal determination that the Tundra B0D campaign is an insignificant activity or insignificant emissions unit, as defined in Rule 1200-3-9-.04(2)(a)3 of the Tennessee Air Pollution Control Regulations, and is not subject to air permitting under Rule 1200-3-9-.04(4)(a). In addition, because any potential future Tundra CRC campaign will have emissions that are not materially different from those of the Tundra B0D campaign and will be conducted using the same type of CRC materials and spray gun, we also request that your determination that the program qualifies as an “insignificant activity” apply not only to the current Tundra B0D covering MY 2000-2003 Tundra trucks, but also to any future CRC campaigns involving MY 2004-2008 Tundra trucks.

II. DESCRIPTION OF TUNDRA B0D

Under the Tundra B0D, Toyota dealers will apply two CRCs to the frame rails – one CRC known as “712AM” to the interior and one CRC known as “Noxudol 300 S” to the exterior – using a

² The alternative exterior CRC Toyota has chosen for the Tundra B0D and future CRC campaigns is Noxudol 300 S, which has a low VOC content measured at 10.71 g/L (or 0.09 lbs/gal). The VOC content of 712AM, the same CRC used to treat interior frame surfaces for both the Tundra B0D and the Tacoma LSC 90D, has a VOC content of 19.77 g/L (or 0.165 lbs/gal). The VOC content of Noxudol 300 S and 712 AM is below the exemption threshold of 20 g/L under Chapter 159, Section 3.A (3).

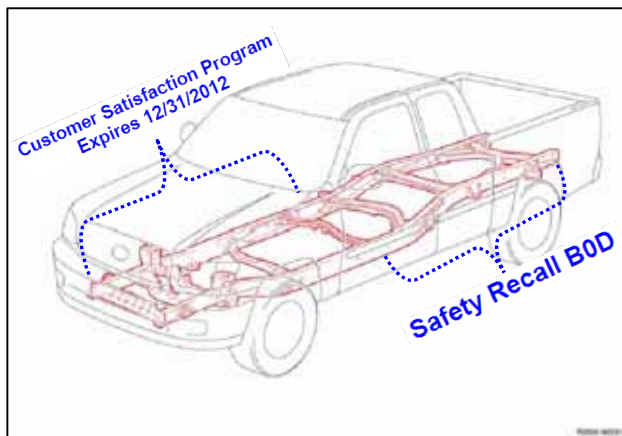
³ To ensure the PTE represents maximum potential emissions for application of CRCs to vehicles, the calculation covers not only the MY 2000-2003 Tundras now subject to B0D, but also additional MY 2004-2008 Tundras being evaluated by Toyota for a possible future CRC customer service campaign.

specialized Vaupel HSDR 3300 spray gun. A similar campaign was previously presented to APCB in July 2009 based on the use of the same Vaupel HSDR 3300 spray gun to apply the same interior CRC (*i.e.*, 712AM), but a different exterior CRC known as “X128T”. In August 2009, APCB authorized Toyota of Kingsport to conduct the Tacoma LSC 90D with the 712AM and X128T CRCs by issuing formal determinations that the Tacoma LSC 90D is an insignificant activity or insignificant emissions unit not subject to air permitting.

The Tundra B0D stems, in part, from a voluntary safety recall under the auspices of the National Highway Traffic Safety Administration (NHTSA). This safety recall involves only the rear cross-member portion of the frame. As one of the measures being implemented under this recall, Toyota dealers will apply a CRC to the rear cross-member portion of the frame of vehicles covered by the safety recall. Due to the “C channel” configuration of the rear of the frame rails, no interior CRC application is required there.

For a limited time, Toyota also intends to offer owners of the MY 2000-2003 vehicles subject to the safety recall the additional customer satisfaction measure of CRC application to the front portion of the frame rails. Due to the box shape of the front of the frame rails, this measure will entail application of 712AM to the interior and Noxudol 300 S to the exterior frame rail surfaces.

Figure 1. Tundra vehicle underside frame rails subject to B0D



III. PROCESS OVERVIEW

The Tundra B0D involves an operation very similar to the Tacoma LSC 90D. For Tundra B0D, trained technicians at Toyota dealerships will apply two corrosion-resistant compounds— one to the interior surfaces and a second to the exterior surfaces – to the vehicle’s frame rails. See the Process Overview document included in Attachment 1.

A. Materials

Toyota will provide its dealers with kits that contain the quantity of CRCs required for an individual vehicle. Dealers will use the same interior CRC as is now being used for the Tacoma

LSC 90D – 712AM – a paraffin wax-based product containing 0.165 lbs/gal (19.77 g/L) of VOC.⁴ One liter (0.264 gallons) of 712AM will be applied to the interior surfaces of each Tundra frame.

For the Tundra B0D, Toyota will replace the exterior CRC now being used for the Tacoma LSC 90D (*i.e.*, X128T), with Noxudol 300 S, a low-solvent, wax-based product with a much lower VOC content (0.09 lbs/gal or 10.71 g/L), and with no hazardous air pollutants, SOx, NOx, or lead. With its Class IIIB combustibility rating, as compared with the Class II rating of X128T, Noxudol 300 S also offers improved fire safety. Three liters (0.792 gallons) of Noxudol 300 S will be applied to the exterior surfaces of each Tundra frame.

Both of these sealant materials contain trace amounts of calcium carbonate, and Noxudol 300 S also contains trace amounts of carbon black and crystalline silica (although, as explained in the MSDSs, the carbon black and crystalline silica are bound in each sealant and will not be released as respirable particles). Neither material contains any federal Hazardous Air Pollutants (HAPs), SOx, NOx, or lead. The MSDSs for Noxudol 300 S and 712AM are provided in Attachment 2.

B. Equipment

For the Tundra B0D, Toyota will provide each dealer with one additional Vaupel HSDR 3300 spray gun to apply the Noxudol 300 S. Dealers will use the spray gun already being used for the Tacoma LSC 90D to apply the 712AM.⁵

Toyota has chosen the Vaupel HSDR 3300 because neither of the CRCs can be applied properly using a conventional high-volume, low-pressure (HVLP) spray gun. Notably, based on the spray gun's high transfer efficiency,⁶ on March 22, 2011, the California South Coast Air Quality Management District (SCAQMD) approved the Vaupel HSDR 3300 for use when applying the two CRCs. As noted in the SCAQMD approval, the transfer efficiency of the Vaupel HSDR 3300 when applying Noxudol 300 S could not be compared directly to HVLP spray guns for purposes of determining "equivalency" because "[t]he lack of sufficient accessibility to the frame rails prevents the successful use of HVLP spray technology for applying the exterior protective coating."

⁴ This material used to be manufactured by Parker Industries under license from Daubert Chemical Company, Inc. under the trade name "Nox-Rust 712AM." It now is manufactured by Parker Industries independently under the trade name "712AM."

⁵ As noted above, in the event that Toyota launches additional CRC campaigns for other vehicle models after December 31, 2011, dealers may be given the option of establishing a second service bay for spraying, and if so, receive a second set of spray guns.

⁶ The SCAQMD's review was based on transfer efficiency testing under standard SCAQMD protocols indicating that the Vaupel HSDR 3300 transfer efficiency is 69% for Noxudol 300 S. Subsequent testing, using a mock-up of a Tundra frame with the Vaupel HSDR 3300 optimized as a dealer would use it, indicates that the transfer efficiency for Noxudol 300 S *in situ* is greater than 85%. Testing could not be performed for the 712AM material due to the nature of the interior application, but a transfer efficiency can be calculated based on interior frame dimensions (minus the openings in the frame), and this calculated transfer efficiency is very high – approximately 99% for 712AM.

The Vaupel HSDR 3300's high transfer efficiency – coupled with the corrosion-resistant compounds' low VOC content and the campaigns' dealer-based implementation structures – means that the B0D will generate minimal air emissions.

C. **Waste Management**

As with the Tacoma LSC 90D, the additional Vaupel HSDR 3300 spray gun provided to apply Noxudol 300 S in the Tundra B0D will not require cleaning. Therefore, the Tundra B0D will generate minimal waste, consisting solely of cleanup supplies, such as soiled rags, and any excess materials. The B0D materials do not qualify as hazardous waste when discarded. However, because the X128T being used for the Tacoma LSC 90D may qualify as hazardous waste, and dealers will conduct the Tundra B0D in the same spray area as the LSC 90D, dealers will be advised to manage any combined B0D-LSC 90D waste as hazardous.

IV. **VEHICLE-BASED PTE CALCULATION**

As a result of the differences in vehicle configuration and the change in the exterior corrosion-resistant compound, the air emissions characteristics of the B0D will differ from those of the LSC 90D. However, the two campaigns share a key trait: an inherent emissions limit imposed by the finite number of vehicles involved.

Therefore, it is appropriate to use the same “units in operation” or “UIO” methodology to calculate the B0D's potential emissions as was employed for the LSC 90D. This UIO methodology is keyed to the maximum potential number of vehicles that Toyota of Kingsport might process under the B0D. Vehicle identification numbers (VIN), combined with Tennessee Driver and Vehicle Service data, indicate – with a high degree of accuracy – that this maximum potential number is 238 vehicles⁷

The UIO methodology then involves taking this maximum number of vehicles and applying an adjustment factor of 150 percent. Doing so accords with the regulatory purpose of PTE to identify a maximum theoretical “worst case” emissions level by ensuring an even more conservative PTE calculation. This 150 percent adjustment factor increases to 357 the maximum number of vehicles that might be treated at Toyota of Kingsport. This vehicle-based approach to PTE properly accounts for the limited extent of the B0D, but at the same time – due to the built-in 50 percent “cushion” and the likelihood that not all eligible vehicle owners will elect to participate – significantly overstates B0D emissions from any particular dealer.

Toyota has structured the B0D in a manner that will inherently limit both actual and potential air emissions on a per dealer basis. As noted above, each dealer will have only one Vaupel HSDR 3300 spray gun for application of each CRC. Toyota dealers also are being asked to conduct the B0D in the same service bay that is currently being used for the LSC 90D. As a result of these measures, dealers will not be able to apply CRCs to two vehicles at the same time.⁸ Moreover, as with the LSC 90D, dealers will be provided with kits that contain only the quantity

⁷ This UIO-based PTE includes that full range of model years – MY 2000-2008 – that might receive an application of the CRC and not just the MY 2000-2003 subject to the safety recall. See Note 2 above.

of each CRC required for a single vehicle and dealers will be financially compensated for the B0D based on matching each such kit to the unique Vehicle Identification Number (VIN) assigned to each vehicle.

In the event that Toyota launches additional CRC campaigns for other vehicle models, after December 31, 2011, dealers may be given the option of establishing a second service bay for spraying, and if so receive a second set of spray guns. If a second service bay is proposed to be established, Toyota will provide you with specific PTE analysis which we expect will demonstrate that the additional spraying activity will also qualify as an insignificant activity under Tennessee air quality regulations.

Section V below reviews the per-vehicle, per-hour, per-day and yearly PTE emission calculations associated with the B0D. Based on the emission factors detailed below and using the upwards-adjusted 357 maximum potential number of vehicles that might be treated at Toyota of Kingsport, the PTE emissions for the entire B0D are as follows:

- Volatile Organic Compounds – 0.02 tons; and
- Particulate Matter –0.02 tons.

The Toyota of Kingsport PTE for the LSC 90D and the B0D, in the aggregate, would be:

- Volatile Organic Compounds – 1.53 tons (1.51 tons from the LSC 90D and 0.02 tons from the B0D); and
- Particulate Matter – 0.05 tons (0.03 tons from the LSC 90D and 0.02 tons from the B0D).

Notably, this combined LSC 90D and B0D emissions estimate overstates potential future emissions because the LSC 90D emission estimates presented here include the entire Tacoma UIO and do not account for vehicles that have already been treated.

V. VOC & PM EMISSIONS CALCULATIONS

A. VOC Emissions

1. Per Vehicle

Both Noxudol 300 S and 712AM contain VOCs that may be emitted during application and/or curing. The Noxudol 300 S material contains 0.09 pounds of VOCs per gallon, while the 712AM material contains 0.165 pounds of VOCs per gallon.

⁸ To the extent that a dealer is unable to use the same service bay, e.g., due to size or lift capacity limitations, a dealer may need to establish a second service bay to conduct the Tundra B0D. However, any simultaneous spraying of CRCs still would be limited in such scenario given that the dealer will have only one Vaupel HSDR 3300 spray gun for each CRC. See Note 3 supra.

Dealers will apply a total of 1.06 gallons (4 liters) of anti-corrosion materials to each B0D vehicle – 0.792 gallons (3 liters) of Noxudol 300 S and 0.264 gallons (1 liter) of 712AM. Assuming all VOCs present in these materials are emitted during their application and/or curing, the B0D will result in VOC emissions of 0.11 pounds per vehicle (0.792 gals/Noxudol 300 S per vehicle × 0.09 lbs/VOCs per gal + 0.264 gals/712AM per vehicle × 0.165 lbs/VOCs per gal = 0.11 lbs/VOCs vehicle).

In comparison, the Tacoma LSC 90D emits 2.86 pounds of VOCs per vehicle.

2. Per Hour

It takes approximately 125.3 minutes (2.09 hours) to apply both CRCs to each Tundra vehicle. Due to having only one service bay for applying materials and one Vaupel HSDR 3300 spray gun for each material, a dealer will not be able to apply CRCs to more than one vehicle at a time. As explained above, the total quantity of CRCs applied to each vehicle will result in maximum VOC emissions of 0.11 pounds. Therefore, the maximum hourly average VOC emission rate for the B0D is 0.05 pounds per hour (0.11 lbs/vehicle ÷ 2.09 hrs/vehicle = 0.05 lbs/hr).

For the Tacoma LSC 90D, maximum hourly VOC emissions are 2.93 pounds per hour (based on a 58.5-minute application time and emission of 2.86 pounds of VOC per vehicle). Given that only one service bay will be used for both the LSC 90D and the B0D, the LSC 90D emissions (2.93 lbs/hour) will represent the maximum hourly VOC emissions for the period from the present through the end of the LSC 90D on December 31, 2011.

3. Per Day

Based on (i) the time necessary to apply the CRCs to one vehicle (i.e., approximately 125.3 minutes), (ii) the fact that each dealership generally operates for no more than 12 hours/day, and (iii) other inherent B0D limitations (e.g., the additional time it takes to clean each vehicle using mechanical techniques prior to applying the CRCs and the fact that each dealership will have only one set of spray guns), a dealership will only be able to process a maximum of 5 Tundra vehicles per day. This maximum processing rate would yield no more than 0.55 pounds of VOC emissions per day (5 vehicles/day × 0.11 lbs/vehicle = 0.55 lbs/day).

Underscoring the efforts of Toyota to identify a lower VOC exterior CRC, the similar calculation for the LSC 90D indicates notably higher maximum daily VOC emissions of 34.3 pounds per day (based on a maximum of 12 trucks per day and 2.86 pounds/vehicle).

4. PTE

Based on VOC emissions of 0.11 pounds per vehicle, the Toyota of Kingsport UIO-based PTE for B0D, assuming 357 vehicles (with the 150 percent adjustment factor), is 0.02 tons (0.11 lbs/vehicle × 357 vehicles ÷ 2,000 lbs/ton = 0.02 tons).

The Toyota of Kingsport UIO-based PTE for the Tacoma LSC 90D is 1.51 tons of VOCs. Thus, the aggregate Toyota of Kingsport VOC PTE for the LSC 90D and B0D is 1.53 tons (1.51 tons + 0.02 tons = 1.53 tons), but if adjusted to reflect only those Tacoma vehicles that have not yet been serviced under the LSC 90D (566 vehicles, with the 150 percent adjustment factor), the aggregate remaining VOC PTE for Tacoma and Tundra would be 0.83 tons

B. PM Emissions

PM emissions from 712AM will be minimal due to the inherently high transfer efficiency (*i.e.*, low overspray) when spraying the interior surfaces of the Tundra frame. A calculation of transfer efficiency based on the frame dimensions and limited frame openings indicates a transfer efficiency of slightly higher than 99% when applying 712AM material to the interior frame surfaces. PM emissions, therefore, will result primarily from the exterior material, Noxudol 300 S. Testing demonstrates that the Vaupel HSDR 3300 spray gun has a transfer efficiency of at least 85% when applying Noxudol 300 S to the external frame surfaces.

1. Per Vehicle

Dealers will apply 0.792 gallons (3 liters) of Noxudol 300 S and 0.264 gallons (1 liter) of 712AM to each Tundra vehicle. If it is assumed that 100% of any solids that are not transferred onto a vehicle are emitted as PM, the application of Noxudol 300 S would result in emissions of 0.94 pounds of PM per vehicle ($0.792 \text{ gals/vehicle} \times 7.97 \text{ lbs/gal} \times 98.9\% \text{ solids by weight} \times (100\% - 85\% \text{ transfer efficiency}) = 0.94 \text{ lbs/vehicle}$) and the application of 712AM would result in emissions of 0.01 pounds of PM per vehicle ($0.264 \text{ gals/vehicle} \times 7.885 \text{ lbs/gallon} \times 97.9\% \text{ solids by weight} \times (100\% - 99\% \text{ transfer efficiency}) = 0.02 \text{ lbs/vehicle}$). Therefore, assuming 100% emission of solids as PM, total PM emissions from the B0D would be 0.96 pounds per vehicle.

However, after analyzing the results of tests performed by Concurrent Technologies Corporation to evaluate application of Noxudol 300 S to the Tundra frame, Environ Corporation has concluded that at least 90% of any PM emitted from application of Noxudol 300 S will fall out of the air before reaching the ambient outdoor air, thus reducing the B0D's emissions from application of the exterior CRC by at least 90%. Applying this 90% fallout factor to the exterior CRC emissions, and conservatively assuming a 75% fallout factor for the interior CRC emissions, total PM emissions from the B0D are expected to be at most 0.1 pounds per vehicle ($0.94 \times 10\% + 0.02 \times 25\% = 0.10 \text{ lbs/vehicle}$).

In comparison, the LSC 90D emits 0.07 pounds of PM per vehicle (using a 75% fallout factor).⁹

⁹

No study was conducted to verify the fallout factor for application of X128 to the Tacoma frames, and therefore, Toyota's consultant, Environ Corporation, determined that it would use a 75% fallout factor as a conservative measure.

2. **Per Hour**

As explained above, the application of the CRCs to one Tundra takes approximately 125.3 minutes (2.09 hours) and the single set of spray guns will limit each dealership to spraying only one Tundra vehicle at a time. Therefore, the maximum hourly average PM emissions rate for the B0D is 0.05 pounds per hour ($0.10 \text{ lbs/vehicle} \div 2.09 \text{ hrs/vehicle} = 0.05 \text{ lbs/hr}$).¹⁰

For the LSC 90D, maximum hourly PM emissions are 0.07 pounds per hour (based on a 58.5-minute application time and emission of 0.07 pounds of PM emitted per vehicle). Due to only one service bay being used for both the LSC 90D and the B0D, the LSC 90D emissions (0.07 lbs/hour) represent the maximum hourly PM emissions for the period from the present through the end of the LSC 90D on December 31, 2011.

3. **Per Day**

As explained above, a dealership participating in the B0D will process no more than 5 Tundra vehicles per day. Processing 5 vehicles per day will result in the emission of up to 0.50 pounds of PM per day ($5 \text{ vehicles/day} \times 0.10 \text{ lbs/vehicle} = 0.5 \text{ lbs/day}$).

The similar calculation for the LSC 90D yields maximum daily PM emissions of 0.8 pounds per day (based on a maximum of 12 trucks per day and 0.07 pounds/vehicle).

4. **PTE**

Based on PM emissions of 0.10 pounds per vehicle, the Toyota of Kingsport UIO-based PTE for B0D, assuming 357 vehicles (with the 150 percent adjustment factor), is 0.02 tons ($0.10 \text{ lbs/vehicle} \times 357 \text{ vehicles} \div 2,000 \text{ lbs/ton} = 0.02 \text{ tons}$).

Using the same methodology, the PTE for the LSC 90D emissions was calculated to be 0.03 tons. Thus, the aggregate PM PTE for the LSC 90D and B0D would be 0.05 tons ($0.03 \text{ tons} + 0.02 \text{ tons} = 0.05 \text{ tons}$). If this amount is adjusted to reflect only those Tacoma vehicles that have not yet been serviced under the LSC 90D (566 vehicles, with the 150 percent adjustment factor), the aggregate remaining PM PTE for LSC 90D and B0D would be 0.04 tons.

¹⁰ This value represents the average hourly emission rate of PM while applying both CRCs over the entire time required to treat a single Tundra vehicle. Higher instantaneous emissions could occur during application of Noxudol 300 S (approximately 0.055 lbs/hour at a 90% fallout rate).

Summary of LSC 90D and B0D Emissions

	Tacoma LSC 90D	Tundra B0D	Aggregate
VOC			
Per Vehicle (lbs)	2.86	0.11	n/a
Per Hour (lbs/hr)	2.93	0.05	n/a
Per Day (lbs/day)	34.3	0.55	n/a
PTE (tons)	1.51	0.02	1.53
PM			
Per Vehicle (lbs)	0.07	0.10	n/a
Per Hour (lbs/hr)	0.07	0.05	n/a
Per Day (lbs/day)	0.8	0.5	n/a
PTE (tons)	0.03	0.02	0.05

VI. CONCLUSION

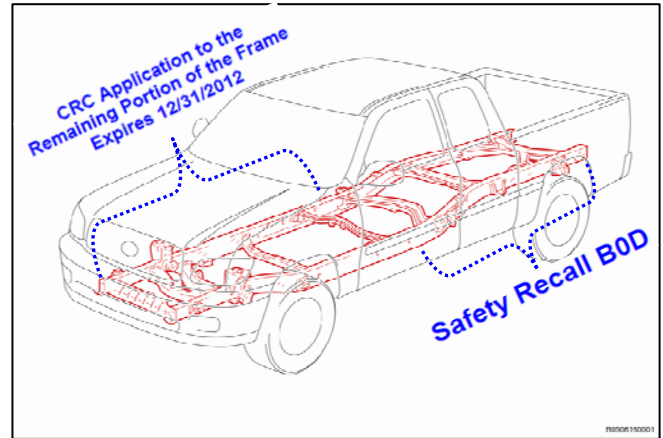
At this time, Toyota of Kingsport seeks a formal determination of agreement from the APCB that the Tundra B0D campaign is an insignificant activity or insignificant emissions unit, as defined in Rule 1200-3-9-.04(2)(a)3 of the Tennessee Air Pollution Control Regulations, and is not subject to air permitting under Rule 1200-3-9-.04(4)(a). While the Tundra B0D campaign is currently planned for Tundra MY 2000-2003, Toyota is evaluating MY 2004-2008 for a potential customer service program and, accordingly, has included the full range of Tundra model years in its PTE calculations. Any such future Tundra campaign would use the same Vaupel HSDR 3300 spray gun and the same CRC materials, and would have the same low VOC and PM emissions and low combustibility ratings. We therefore respectfully request that your determination that the program qualifies as an "insignificant activity" apply not only to the current Tundra B0D covering MY 2000-2003 Tundra trucks, but also to potential CRC campaigns involving MY 2004-2008 Tundra trucks, which are currently being considered for future campaigns.

TUNDRA B0D PROCESS OVERVIEW

The Tundra Corrosion-Resistant Compound Campaign B0D (B0D) comprises two processes:

- 1) **Safety Recall B0D Application Area**, which entails application of Noxudol 300 S to the external surfaces of the rear portion of the Tundra frame. This procedure is available to customers without a time limit.
- 2) **Customer Satisfaction Program Application Area**, which entails application of Noxudol 300 S to the external surface, and application of 712AM to the internal surface, of the front portion of the frame. This procedure is available until 12/31/2012.

Tundra Frame Diagram Identifying B0D Components

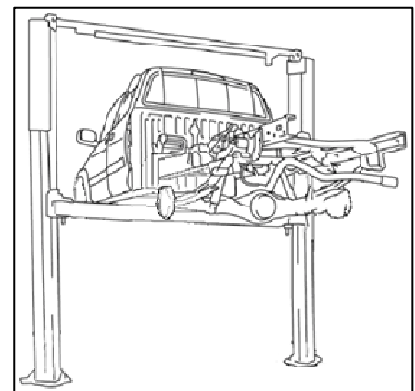


All Tundra B0D activities will occur indoors at existing dealership service areas that comply with fire, zoning and building codes. The B0D will consist of the three primary steps discussed below.

Step 1: Initial Work Area Setup. Locate dedicated work area in dealership's service area that has a vehicle lift, is well ventilated, is away from other vehicles, and can be sectioned off with temporary partitions. No physical alteration of the workspace or installation of new equipment is required for the B0D. You should use the work area already used for the Tacoma LSC 90D if it is large enough to accommodate the Tundra.

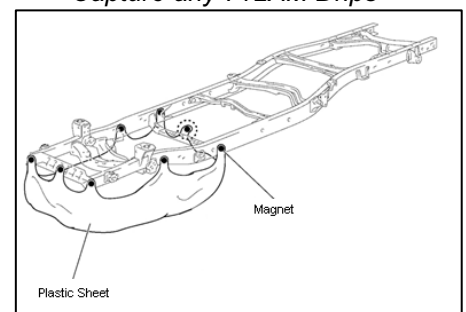
Step 2: Vehicle Preparation. Dealers will employ the following procedures to prepare their service areas and vehicles for spraying.

Tundra on Lift with Bed Removed



- Remove truck bed assembly.
- Clean frame, if necessary. It may be necessary to clean the frame, 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 (e.g., tires and wheels, spare tire, engine under cover).
- 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, wire brush, and/or compressed air.
- Mask parts. Mask areas not to be sprayed (e.g., drive shaft, brake/hub assemblies, exhaust).

Attachment of Plastic Sheet to Capture any 712AM Drips

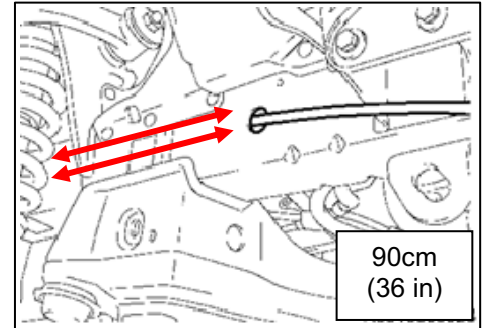


- Attach Plastic Sheet: To capture any 712AM that may drip through small holes in the frame, use magnets to suspend a plastic sheet underneath the front portion of the frame.

Step 3: Material Application. Dealers will apply the B0D Corrosion-Resistant Compounds as follows:

- Apply 712AM. Set up Vaupel spray gun and insert 8mm spray nozzle a specified distance into selected holes in the frame. Press spray gun trigger and pull out nozzle at fixed speed while spraying interior surface of frame with one liter of 712AM. When finished, insert rubber plugs and foam blocks to keep 712AM in the frame.

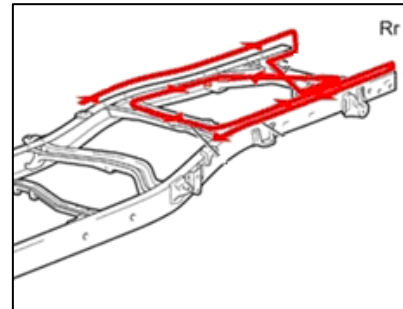
360° Spray Wand Inserted into Frame



- Remove plastic sheet suspended from frame.
- Lower lift. Lower the lift until the top of the rear portion of the frame is approximately 4'6" above the floor.

Top Surface of Rear Frame Portion
Where Noxudol 300 S is Applied

- Apply Noxudol 300 S to top external surface of rear portion of frame. Set up Vaupel spray gun and locate unidirectional handheld spray nozzle 4-8 inches from frame surface. Press spray gun trigger and spray Noxudol 300 S on the top of rear portion of the frame by moving spray nozzle at fixed speed across frame surface.

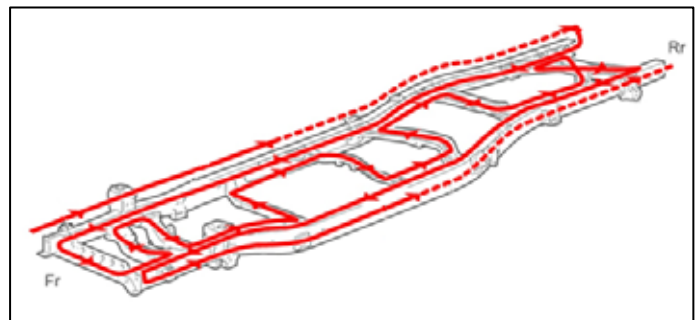


- Reattach truck bed assembly.

- Raise truck on lift.

- Apply Noxudol 300 S to frame bottom and side external surfaces. From the same working distance, press spray gun trigger and apply remaining Noxudol 300 to bottom and side external surfaces of entire frame at fixed speed. Refill spray gun with Noxudol 300 as needed until all three (3) liters of material are used.

Side and Bottom Surfaces of Frame
where Noxudol 300 S is Applied



- Final steps. Reinstall components of vehicle; remove all masking; remove truck from lift; and spray Noxudol 300 S on areas of frame previously covered by lift arms. Allow 712AM and Noxudol 300 S to cure overnight before returning vehicle to customer. Comply with any recordkeeping and material handling requirements.

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

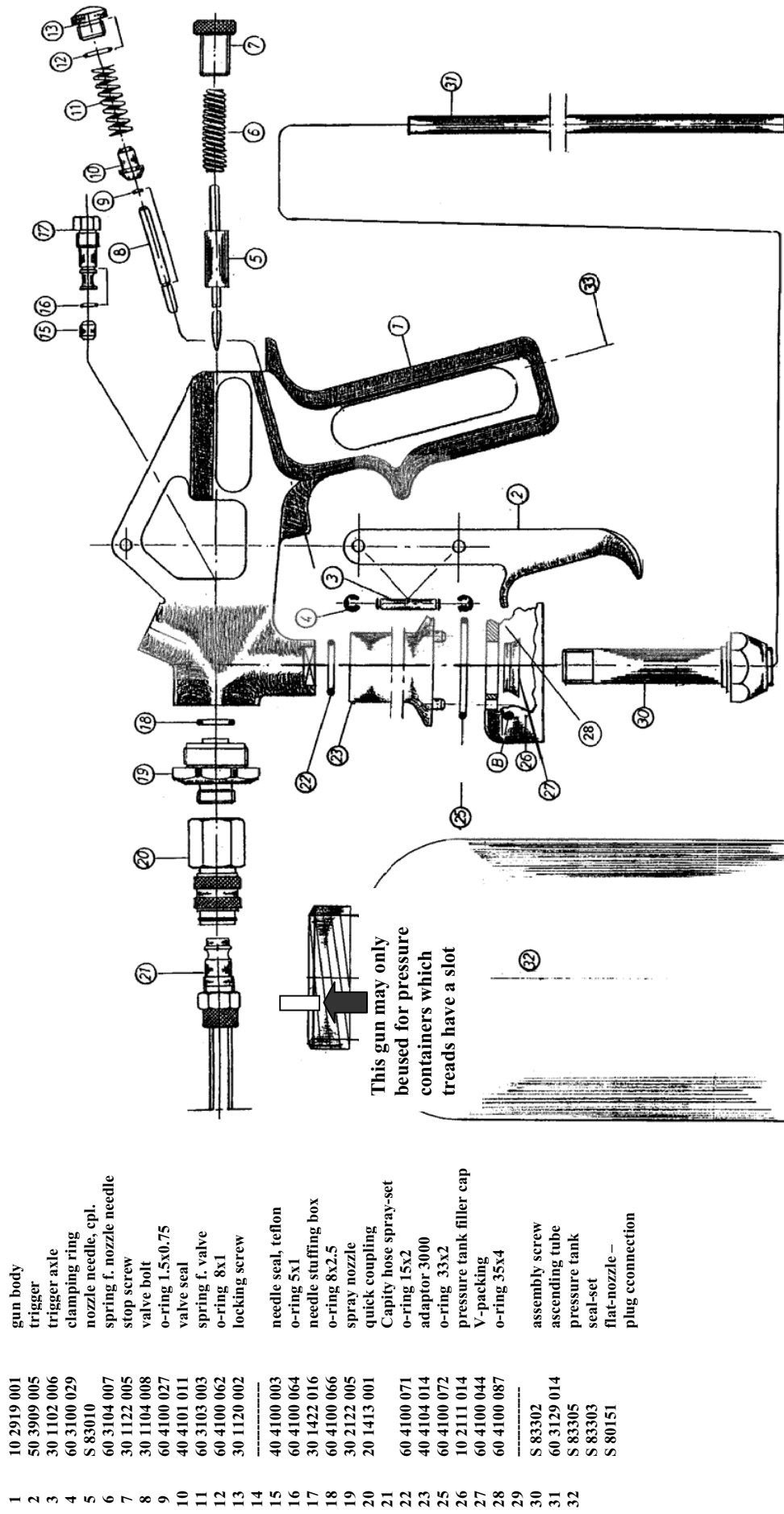
- Valve bolt (8) is stuck or does not close:
Put oil on the valve bolt or into the air intake port of the gun. Depress the trigger (2) several times.
- Gun does not spray properly:
Spray nozzle (19), ascending tube (31), cavity spray tube round spray or angle nozzle or gun (1) partly clogged.
Remove 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, epl. |
| 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 |
| 24 | 60 4100 072 | o-ring 33x2 |
| 25 | 10 2111 014 | pressure tank filler cap |
| 26 | 60 4100 044 | V-packing |
| 27 | 60 4100 087 | o-ring 35x4 |
| 28 | | |
| 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 connection |

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:
Date of Preparation: November 14, 2007

Revised: March 17, 2011
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, CO₂, 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.



MATERIAL SAFETY DATA SHEET

Noxudol 300 S

Last Updated April 18, 2011

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
Verkstadsgratan 3
S-434 42 Kungsbacka
Sweden
www.auson.se

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

PHONE: +46 300-562000
FAX: +46 300-562001

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

<u>Chemical Name</u>	<u>Amount % by Wt.</u>	<u>CAS Number</u>	<u>OSHA PEL (ppm)</u>	<u>ACGIH STEL (ppm)</u>
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/(%SiO ₂ +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):

MINIMUM 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



MATERIAL SAFETY DATA SHEET

Noxudol 300 S

Last Updated April 18, 2011

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.

64741-88-4

CHEMICAL NAME

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



MATERIAL SAFETY DATA SHEET

Noxudol 300 S

Last Updated April 18, 2011

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/(%SIO ₂ +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	

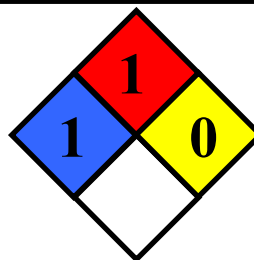


MATERIAL SAFETY DATA SHEET

Noxudol 300 S

Last Updated April 18, 2011

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)

Part Number: --

Approved By: Soken Trade Corporation

Approval Date: April 18, 2011

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

(This page intentionally left blank.)



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

March 22, 2011

Mr. Daniel E. Monette
National Manager
Environmental, Health and Safety
Toyota Motor Sales, U.S.A., Inc.
19001 South Western Avenue
Torrance, CA 90501

Dear Mr. Monette:

Subject: Rule 1151 Transfer Efficiency Approval of the Vaupel HSDR 3300 Spray Gun

Reference is made to your application number 518629 which you submitted to request that the Vaupel HSDR 3300 spray gun be considered equivalent to high-volume, low-pressure (HVLV) spray equipment under Rule 1151(d)(7)A(iii) for the application of internal (Parker 712 AM) and external (Auson AB Noxudol 300S) protective coatings on the frame rails of Toyota Tacoma trucks (model years 1995 through 2004) and Toyota Tundra trucks (model years 2000 through 2006). In support of your request, you submitted the following information.

1. A report entitled, "Supplemental Spray Equipment Transfer Efficiency Test of the Vaupel HSDR 3000 using Noxudol 300" dated January 19, 2011
2. MSDS for the Parker 712 AM and Auson AB Noxudol 300 S coatings
3. Photographs of spray patterns for typical HVLV spray guns and the Vaupel HSDR 3300 spray gun
4. Photographs of the Tundra undercarriage showing the frame rails
5. Drawings of the Tacoma and Tundra frames
6. An e-mail dated February 3, 2011 containing supplemental information

The results of the transfer efficiency testing performed on December 28, 2010 indicate that the Vaupel HSDR 3300 spray gun is capable of achieving a transfer efficiency of 69.04% when applying the Auson AB Noxudol 300 S exterior protective coating. Toyota Motor Sales did not submit transfer efficiency test results for an HVLV spray gun applying the Auson AB Noxudol 300 S exterior protective coating for comparison purposes since HVLV spray technology is not capable of reaching all of the exterior surfaces of the frame rails due to the configuration of the frame rails and other vehicle parts that are in close proximity to the frame rails. The lack of sufficient accessibility to the frame rails prevents the successful use of HVLV spray technology for applying the exterior protective coating.

While actual transfer efficiency testing was not conducted to simulate the proposed application of the Parker 712 AM interior protective coating, Toyota Motor Sales did submit information on February 26, 2009 and January 21, 2011 regarding the configuration of the frame rails and the viscosity of the coating. Both the interior configuration of the frame rails and the high viscosity of the Parker 712 AM coating make the use of HVLP spray equipment infeasible. A review of the design of the tubular frame rails of the Tacoma and Tundra trucks indicates that the transfer efficiency for coating the interior of the frame rails should approach 99%.

Based on the transfer efficiency test data for the Auson AB Noxudol 300 S exterior protective coating, an evaluation of the configuration of the Tacoma and Tundra frame rails, the tubular configuration of portions of the Tacoma and Tundra frame rails, the calculated transfer efficiency for coating the interior of the tubular frame rails, and the viscosity of the Parker 712 AM interior coating, the Vaupel HSDR 3300 spray gun is approved for limited operations subject to Rule 1151, Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations, under Rule 1151(d)(7)(A)(iii) provided the following conditions are met.

1. The Vaupel HSDR 3300 spray gun shall only be used to apply Auson AB Noxudol 300S and Parker 712AM corrosion preventive coatings to the frame rails of Toyota Tacoma trucks model years 1995-2004 and Tundra trucks model years 2000-2006 at the Toyota Motor Sales, U.S.A., Inc. facility located at 2015 W. 190th Street, Torrance, CA 90501 and identified by District facility ID 80904.
2. This approval is only valid if the air pressure supplied to the Vaupel HSDR 3300 spray gun is equal to or less than 52 psig when applying the Auson AB Noxudol 300 S coating and equal to or less than 75 psig when applying the Parker 712 AM coating.
3. This approval is only valid if during actual operation the Vaupel HSDR spray gun is equipped with a 160 psig (full scale) mechanical pressure gauge with markings every 2 psig and the pressure gauge is operating properly.
4. The Vaupel HSDR 3300 spray gun shall be equipped with a Vaupel Cavity Spray Tube 3900/3901-WH spray wand when applying the corrosion preventive coatings. The Auson AB Noxudol 300 S protective coating shall only be applied to the exterior of the frame rails. The Parker 712 AM protective coating shall only be applied to the interior of the frame rails. During operation, the maximum distance of the spray wand tip to the substrate to be coated shall not exceed 8 inches.
5. Pursuant to District Rule 219, unless a permit to construct and operate is obtained from the District for the Vaupel HSDR 3300 spray gun, the maximum quantity of coatings and associated VOC containing solvents (including clean-up) used in the Vaupel HSDR 3300 spray gun shall not exceed 1 gallon per day or 22 gallons per calendar month. Toyota Motor Sales shall maintain records of

the coating usage. The last two years of records shall be retained at the facility and be made available to District representatives upon request.

6. This approval is only valid for the Vaupel HSDR 3300 spray gun model tested. Any modification of the spray gun or pressure gauge design shall invalidate this approval unless the modification is approved by the South Coast Air Quality Management District.

If you have any questions regarding this approval, please call Emmanuel Quizon, AQ Engineer, at (909) 396-2523 or send him an e-mail at equizon@aqmd.gov.

Sincerely,



Fred Lettice
Senior Manager
Coating, Printing, Plating, Military
& Entertainment Operations

FEL:EVQ

(This page intentionally left blank.)

**TUNDRA CORROSION-RESISTANT COMPOUND CAMPAIGN B0D
TENNESSEE/VIRGINIA DEALER INFORMATION PACKET
FOR TENNESSEE DEALERS SERVICING VIRGINIA-REGISTERED TUNDRAS**

FEDERAL, STATE AND LOCAL REQUIREMENTS GUIDE

FIRE, BUILDING AND ZONING CODES SECTION

Please review the entire Information Packet – including this Fire, Building and Zoning Codes Section – with your Service and Parts staff.

In addition to the requirements identified in other Sections, your dealership must comply with any applicable state and local fire, building and zoning code requirements. This Section discusses how to comply with these requirements.

WHERE WILL YOU CONDUCT THE B0D?

Same Space As Tacoma LSC 90D: If you will conduct the Tundra B0D in the same space now being used for the Tacoma LSC 90D, then you should be able to rely on the approval already received for the LSC 90D from your local fire code enforcement official. **Before beginning the Tundra B0D**, you will need simply to notify your local fire code enforcement official, in writing, of your intention to use this same space to spray lower combustibility CRCs on Tundras, and then, you may proceed without any additional approval (unless this official contacts you and requests that you not proceed). You will find a model letter and attachments for providing this notification later in this Section.

Different Space From Tacoma LSC 90D: If you intend to conduct the B0D in a space different from the one now being used for the Tacoma LSC 90D, then you will need a new approval from your local fire code enforcement official. Please discontinue reading this Section and call the C.L.E.A.N. Dealer EH&S Hotline at 877-572-4347 to discuss your situation and also consult the Site Selection Section of this Dealer Package.

BEFORE you begin applying B0D materials, you must do BOTH of the following:

1. **Notify the appropriate fire code enforcement official, in writing, of your intent to conduct the Tundra B0D in the same space now being used for the Tacoma LSC 90D**

In Appendix A you will find a model letter and attachments that you can use to notify your fire code enforcement official. You will need to add some descriptive information confirming that the space where you will conduct the Tundra B0D is the same now being used for Tacoma LSC 90D.

These materials include a Determination of Compliance with the applicable fire codes prepared by Commercial Construction Consulting, Inc. ("C3") for TMS. To identify your appropriate fire code enforcement official see Table 1 of this Section (starting at page 83).

IMPORTANT – PLEASE READ

Important: The Tundra B0D is designed to comply with state and local fire codes and with your previous approval to conduct the Tacoma LSC 90D. Therefore, you should be able to notify your fire code enforcement official about B0D and then proceed with the Campaign. It is possible, however, that your fire code enforcement official may request that you not proceed with the Tundra B0D until the official can review your situation. If this occurs, please work with your official and do not proceed with B0D until you have received his approval to do so. **If you face this situation and have questions or need assistance, go to the C.L.E.A.N. Dealer website (<http://cleandealer.com>) or call the EH&S Hotline (877-572-4347) prior to conducting the B0D.**

2. **Confirm that you can conduct the B0D in compliance with applicable fire code, building, and zoning requirements.**

Locate your city/town/county on Table 1 (starting at page 83) to see whether it has any additional building, zoning, or other requirements applicable to the B0D and contact your local officials as indicated.

(Go to next page for summary of applicable State requirements.)

I. SUMMARY OF APPLICABLE STATE REQUIREMENTS

A. Fire Code⁵

1. The B0D does not require a state fire permit under the Tennessee State Fire Code (Fire Code) and Appendix A contains a Determination of Compliance that the B0D complies with the Fire Code (and locally adopted fire codes, as appropriate) so long as you conduct the B0D in the same location where you are conducting the Tacoma LSC 90D and you continue to follow the procedures outlined in this Fire, Building & Zoning Code Section and the Site Selection Section of the Dealer Packet. The Fire Code does require you to inform the appropriate fire code enforcement official before commencing B0D operations at your dealership. See Table 1 (starting at pg. 83) for your dealership's requirements and appropriate fire code enforcement official.

Regulatory Note: Your dealership is assumed to comply already with existing fire code requirements (e.g., sprinkler systems, ventilation, etc.) applicable to your dealership.

IMPORTANT! – FIRE CODE INFORMATION

You must continue to comply with items 2 and 3 below, and any additional requirements contained in Table 1 (starting at p. 83) or placed on your dealership as part of the approvals received for the Tacoma LSC 90D as part of your implementation of the B0D. **If you cannot meet all the requirements identified in items 2 or 3, please go to the C.L.E.A.N. Dealer website (<http://cleandealer.com>) or call the EH&S Hotline (877-572-4347) for additional assistance.**

2. You should be able to conduct the B0D consistent with state and local fire codes so long as you conduct the B0D in the same location as the LSC 90D and continue to satisfy all of the following requirements:
 - a. Adequate ventilation in the area where the B0D will be conducted; **and**
 - b. No open flames or spark-producing equipment within 20 ft of the B0D operations; **and**
 - c. No drying, curing, or fusion apparatus within 20 ft of the B0D operations; **and**
 - d. No solvents used for cleaning procedures with a flash point below 100°F. (Note: the B0D will not require any cleaning procedures that require solvents with flash point(s) below 100°F.); **and**
 - e. That the materials applied to the truck bed include only Class IIIB liquids and not include any organic peroxide catalyst⁶ (Note: Each of

⁵ Tennessee adopts the International Fire Code (IFC) 2006 ed. as the minimum statewide fire code standard. Pursuant to authority provided to it under state law, your jurisdiction has adopted the National Fire Protection Association's National Fire Codes, which has specific provisions in NFPA 33, the Standard for Spray Application Using Flammable or Combustible Materials, governing spraying operations like the B0D.

⁶ Among other requirements, in order to conduct the B0D consistent with the NFPA 33, the materials sprayed must meet at least one (1) of the following criteria: (1) Be no more hazardous than UL Class 30-40, when tested in accordance

the B0D's Corrosion-Resistant Compounds that you are being provided – interior and exterior - satisfies this requirement); **and**

- f. Fire extinguishers be provided in the vicinity⁷ of the B0D operation (*Note: fire extinguishers must be rated "B", "AB", or "ABC"*).

Note: Consistent with the **Technical Instructions**, the floor space of the area where the B0D will be conducted should be covered by an approved, noncombustible, nonsparking, fire retardant material.

Technical Note: If you have a question about whether your plans for conducting the B0D will satisfy any of these requirements, please go to the C.L.E.A.N. Dealer website (<http://cleandealer.com>) or call the EH&S Hotline (877-572-4347).

3. Both B0D materials are considered Class IIIB combustible liquids and the amount of materials that you will use during the B0D should not trigger any new combustible liquid storage requirements for your dealership. However, as a best management practice, please store consistently with the guidelines below:
- a. **DO NOT store more than 25 gallons of the B0D materials and any other regulated flammable or combustible materials in any one fire area;** otherwise you may be subject to additional requirements; or
 - b. **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.
 - (1) A single fire cabinet may hold up to 120 gallons.
 - (2) Your dealership may only have up to three fire cabinets in each fire area, each of which may hold up to 120 gallons. If you store at these levels (3 x 120 gals = 360 gals) you should confirm with your appropriate fire code enforcement official that such storage at these level does not require an operational permit in your locality.

(Go to Next Page for Building Code Discussion)

with UL 340, Test for Comparative Flammability of Liquids; (2) Not contain any solvent or component that has a flash point below 37.8°C (100°F); or (3) Consist only of Class IIIB liquids and not include any organic peroxide catalyst. The B0D was designed to only use Class IIIB liquids without organic peroxide catalysts.

⁷ See the Site Selection Section in this Dealer Information Packet for specific distancing requirements for fire extinguishers in the vicinity of the spraying area.

B. Building Code⁸

1. **The BOD should not require a building permit under the Tennessee Building Code** because adding the BOD would not “construct, enlarge, alter, repair, move, demolish, or change the occupancy of [your] building,” nor does it “erect, install, enlarge, alter, repair, remove, convert or replace any electrical, gas, mechanical or plumbing system.” (**NOTE:** Local codes **might** impose building permit requirements, as noted in the Table starting on page 83.⁹

Regulatory Note: *It is assumed that your dealership:*

(i) complies already with building code requirements (for example, it is assumed that your dealership has a valid certificate of occupancy, meets the requirements for fire protection specified for repair garages and meets the mechanical ventilation requirements specified for repair garages); and

(ii) does not require any building, electrical, gas, plumbing or mechanical system modifications for the BOD.

If these assumptions do not apply, please go to the C.L.E.A.N. Dealer website (<http://cleandealer.com>) or call the EH&S Hotline (877-572-4347)

II. SUMMARY OF APPLICABLE LOCAL REQUIREMENTS

Table 1 below identifies the local requirements applicable to the BOD (if any). It is organized by the city/local jurisdiction where your dealership is located. **IF THE LOCALITY WHERE YOU PLAN TO CONDUCT THE BOD IS NOT LISTED IN TABLE 1 (STARTING AT PAGE 83), PLEASE GO TO THE C.L.E.A.N. DEALER WEBSITE ([HTTP://CLEANDEALER.COM](http://CLEANDEALER.COM)) OR CALL THE EH&S HOTLINE (877-572-4347).** The sections below briefly review these requirements.

Regulatory Note – Regarding Conditional Use Permits: If your dealership operates pursuant to a conditional use permit, special exception, or other special use permit, you must determine whether that permit prohibits the BOD process or considers it a “change in use” because, if so, then you may need a permit amendment. If you have any questions about zoning requirements, please go to the C.L.E.A.N. Dealer website (<http://cleandealer.com>) or call the EH&S Hotline (877-572-4347).

⁸ Tennessee has adopted, in part, the International Building Code (2006).

⁹ In particular, the application of the CRCs materials being used for the BOD should not trigger any requirements for changes or modifications to the electrical wiring. These liquids are not flammable and are not expected to create a flammable vapor area, and any overspray will be controlled with temporary partitions.

Regulatory Note – Other Generally Applicable Local Laws and Regulations: This Guide does not address other local laws and regulations that may apply generally to your dealership's operations. Such laws and regulations may impose, among other requirements, general housekeeping and/or performance standards that require you to safeguard against improper release of materials that may pose health or environmental risks and to clean up (and report to appropriate authorities) any such improper release.

Unless noted in Table 1, your dealership is likely not subject to additional requirements under local zoning and building codes as a result of the BOD. However, should the need arise to discuss the BOD with your local authorities (in addition to the appropriate fire code enforcement official), the information assembled in Appendix A can be used for that purpose as well.

Table 1: Code Summary for Tennessee Locations

Location Tennessee	Local Fire Code Official & Fire Code Type	Other Potentially Relevant Local Requirements
Bristol	<p>Bob Barnes Fire Chief Bristol Tennessee Fire Department 211 Bluff City Highway Bristol, Tennessee 37620 Phone: 423-989-5701 Fax: 423-989-5706</p> <p>IFC/NFPA Jurisdiction - Materials to contact local fire official are found in Appendix A.</p>	<p>You should verify that the BOD will not constitute a change in use or impermissible use under your dealership's zoning permit or other land use approvals, if applicable.</p> <p>Contact Shari Brown, AICP Community Development Director 104 8th Street Bristol, TN 37601 423-764-0343</p>
Kingsport	<p>Robert Sluss Fire Marshal Kingsport Fire Department 130 Island St. Kingsport, TN 37660 423-229-9440</p> <p>Dee Morgan Building Department The City of Kingsport 225 West Center Street Kingsport, TN 37660 423-229-9393</p> <p>IFC Jurisdiction - Materials to contact local fire official are found in Appendix A.</p> <p>Materials must be sent to both the Fire Marshal's Office and the Building Department.</p>	<p>You should verify that the BOD will not constitute a change in use or impermissible use under your dealership's zoning permit or other land use approvals, if applicable.</p> <p>Contact Alan Webb Planning Manager 201 W Market St Kingsport, TN 37660 423-229-9485</p>

(This page intentionally left blank)

APPENDIX A

Materials to Demonstrate Compliance with the International Fire Code/NFPA 33

Compliance Information

&

Materials to submit to the Appropriate Fire Code Enforcement Official

- **Model Letter**
- **B0D Operation Description**
- **C3 Determination of B0D Compliance with the IFC/NFPA 33**
- **Dealer Information Sheet**

(Electronic copies or available on the C.L.E.A.N. Dealer website - <http://cleandealer.com>)

(This page intentionally left blank.)

Appendix A1: International Fire Code/NFPA 33 Jurisdiction- Summary of Fire Code Requirements

Your local jurisdiction is subject to the 2006 edition of the International Fire Code (IFC) and 2003 edition of NFPA 33, Standard for Spray Application Using Flammable or Combustible Materials.

- **Before you begin conducting the B0D, you will need to provide your local fire code enforcement official with information about the B0D and your intent to conduct the B0D in the same space where you are/were conducting the Tacoma LSC 90D.** Under applicable codes, the appropriate fire code enforcement official has the authority to require plans and specifications to ensure compliance with applicable codes and standards, and may require an operating permit for B0D spraying operations.
- **To assist you with contacting your appropriate fire code enforcement official, Appendix A2 contains** (1) a model letter, (2) a Determination of Compliance and B0D Process Description (and MSDSs) from Commercial Construction Consulting Inc. ("C3"), a professional consulting firm retained by Toyota to assess the B0D's compliance with the IFC/NFPA 33, (3) a background information sheet that you must complete that will provide your appropriate fire code enforcement official with relevant dealer-specific information about where the B0D operation will take place. *(Note: Electronic copies of these materials can be found on the C.L.E.A.N. Dealer website - <http://cleandealer.com>).*
- **You should do the following:**
 - Address the model letter to the appropriate fire code enforcement official and put it on your dealership's letterhead. (See Table 1 beginning at page 83.)
 - Review the background information sheet and complete it by adding facility-specific information, including descriptions of the:
 - Service area where the B0D will be conducted (**Note: this should be the same location where you are/were conducting the Tacoma LSC 90D**);
 - Storage area to be used for B0D materials; and
 - Ventilation system in the area where the B0D will be conducted.
 - **Remember - Enclose the following with the cover letter to the appropriate fire code enforcement official:**
 - The **Determination of Compliance letter prepared by C³**;
 - The **completed dealership information sheet** from Appendix A2.
 - **Copies of the Material Safety Data Sheets (MSDSs)** for the 712AM and Noxudol 300S materials (provided in the Air

Recordkeeping Section of this Guide and on the C.L.E.A.N. Dealer website - <http://cleandealer.com>).

- Make a copy of the letter and attachments for your records before submitting to the appropriate fire code enforcement official.

**APPENDIX A2: Model Letter for IFC/NFPA 33 Jurisdictions and
B0D Process Information to be included with Letter**

*Electronic Copy of Letter and Attachments are available on the on
the C.L.E.A.N. Dealer website - <http://cleandealer.com>.*

(This page intentionally left blank.)

[DEALER LETTERHEAD]

[Insert Appropriate Local Fire Code Enforcement Official Contact Information from Table 1 on page 83]

Re: **NOTIFICATION OF INTENT TO CONDUCT CORROSION-RESISTANT COMPOUND CAMPAIGN IN THE APPROVED SPRAYING AREA OF [LOCAL DEALERSHIP]**

Dear _____:

In November 2009, Toyota announced a safety recall for certain Model Year '00-'03 Tundras. In conjunction with the recall, Tundra Corrosion-Resistant Compound Campaign B0D (B0D) is being implemented to apply Corrosion-Resistant Compound (protective sealant) to Model Year 2000-2003 Tundra vehicles registered in certain cold climate states, including Tennessee. Our dealership is taking part in this B0D. We are writing to provide you with information about the B0D process and to inform you that we intend to begin offering the program on [Insert Date 10 days from now], unless we hear from you otherwise.

Our dealership previously obtained your office's approval to conduct a Limited Service Campaign (LSC) 90D for Tacoma vehicles at our facility located at [insert address]. We contacted you earlier this year to inform you that we would be continuing to offer the Tacoma LSC 90D at our dealership through the end of 2011. In that letter we indicated that Toyota had announced its intention to offer a separate Corrosion-Resistant Compound Campaign to owners of certain model year Tundra vehicles. This B0D is the Tundra campaign that we were referring to and we will be conducting the B0D Tundra campaign in the same approved location where we are currently conducting the Tacoma LSC 90D.

The B0D will involve the spray application of two Class IIIB combustible liquids to the frames of certain model year Tundra trucks. Note the Tacoma LSC 90D involves the spraying of a Class II combustible liquid; however, Toyota has transitioned to a less volatile, Class IIIB combustible liquid for its future undercoating campaigns, including the B0D. The attached documents explain the B0D process, provide a description of the method for applying those materials, confirmation of the location in our vehicle service area where the B0D will take place, and include MSDSs for the materials that will be used. We believe this information demonstrates that the B0D will be conducted in accordance with all applicable laws, regulations, and other codes and is acceptable to your office, as it complies with your previous approval of undercoating operations at our dealership.

For your information, we have attached the following to this letter: (1) a description of the B0D process, materials and equipment; (2) a Determination of Compliance finding that the B0D as designed conforms to the IFC and NFPA 33 and (3) site-specific information confirming the location where we will conduct the B0D is the same location you have already approved for undercoating operations.

If you have any questions or require any additional information, please do not hesitate to contact [Dealership] or [Number]. Thank you for your time and consideration.

Best regards,

Attachments:

- C³ Determination of Compliance, with description of BOD Process and BOD Material MSDSs
- Dealership information sheet

**ATTACHMENT 1: DETERMINATION OF COMPLIANCE AND DESCRIPTION OF THE B0D
PROCESS FROM COMMERCIAL CONSTRUCTION CONSULTING, INC.**

(This page intentionally left blank.)



July 15, 2011

Toyota Motor Sales, U.S.A., Inc.
19001 South Western Avenue, HQ 11
Torrance, CA 90501

**Re: Toyota Corrosion-Resistant Compound Application Program
Compliance with the 2006 International Fire Code, City of Kingsport, TN**

Thank you for engaging Commercial Construction Consulting, Inc. ("C3") to determine compliance with applicable fire code regulations in advance of Toyota Motor Sales' implementation of a program involving the application of two corrosion-resistant compounds (the "CRC Program") to the frame rails on the underside of certain Toyota vehicles.

This analysis is based on the 2006 version of the International Fire Code ("IFC"), adopted and modified by the City of Kingsport.

We recommend that Toyota instruct its dealers to conduct this CRC Program in the same spray space where its dealers had received approval to conduct a similar program known as the Limited Service Campaign (LSC) 90D. However, whereas the LSC 90D involves spray application of a Class II and a Class IIIB combustible liquid, this CRC Program will use the same Class IIIB material, but will substitute a less combustible Class IIIB liquid for the Class II liquid.

We have determined that the CRC Program will be in compliance with the applicable provisions of the 2006 IFC. We have further determined that as long as the CRC Program is conducted in the spray space previously approved for the LSC 90D, and in accordance with operational requirements of the Code's vehicle undercoating exemption, then the CRC Program continues to qualify for the exemption in Section 1504.2 and further approval should not be required.

2006 International Fire Code

Section 1504.2 of the 2006 IFC lists the locations in buildings where spray finishing operations may be conducted. The Exception notes that spraying operations using Class III materials are exempt from the provisions of Section 1504 when adequate ventilation is provided and where otherwise approved by the local fire official:

Regulation: *Section 1504.2 (Location of spray-finishing operations): Spray finishing operations conducted in buildings used for Group A, E, I or R occupancies shall be located in a spray room protected with an approved automatic sprinkler system installed in accordance with standard 903.3.1.1 and separated vertically and horizontally from other areas in accordance with the International Building Code. In other occupancies, spray-finishing operations shall be conducted in a spray room, spray booth, or spraying space approved for such use.*

Exception: *Automobile undercoating operations and spray-on automotive lining operations conducted in areas with approved natural or mechanical ventilation shall be exempt from the provisions of Section 1504 when approved and where utilizing Class IIIA or Class IIIB combustible liquids.*

Analysis: The CRC Program meets the requirements in Section 1504.2 and therefore qualifies for the undercoating exemption in the IFC, because 1) Both materials to be used are Class IIIB; 2) We recommend that dealers be instructed to apply the materials in the same spray space that already has been approved for a similar corrosion-resistant compound program known as the "LSC 90D"; and



3) Dealers also must be instructed to maintain adequate ventilation in this approved spray space and otherwise to conduct the CRC Program in a manner that meets operational requirements of the Code's vehicle undercoating exemption.

Dealers should be able to conduct the CRC Program in the same approved spray area where they conducted the LSC 90D without seeking further approval. Nonetheless, we recommend that dealers notify their local fire official of their intent to conduct the CRC Program in this already-approved spray space and provide the official with the material safety data sheet (MSDS) for the Class IIIB material that will be used in the CRC Program.

If a dealer chooses to conduct the CRC Program in a different service bay from the one previously approved, then the operations at the new bay must comply with the requirements for an exemption under the 2006 IFC Section 1504.2, and the dealer must obtain from the local fire official approval to conduct the CRC Program in the new spray space.

If you have any questions, please do not hesitate to call.

Very truly yours,

A handwritten signature in black ink, appearing to read 'Doug Anderson', with a long horizontal flourish extending to the right.

Doug Anderson
Manager, Code Advisory Group

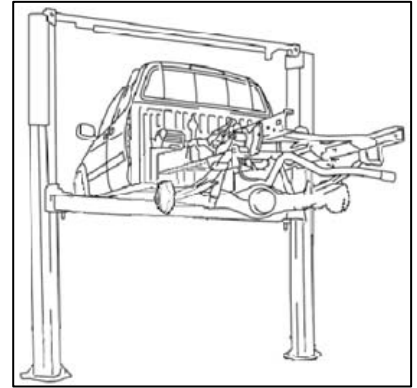
TUNDRA B0D PROCESS OVERVIEW

Step 1: Initial Work Area Setup. Locate dedicated work area in dealership's garage that has a vehicle lift, is well ventilated and can be sectioned off with temporary partitions. No physical alteration of the workspace or installation of new equipment is required for the B0D. The work area previously used for the Tacoma 90D LSC should be used if it is large enough to accommodate the Tundra.

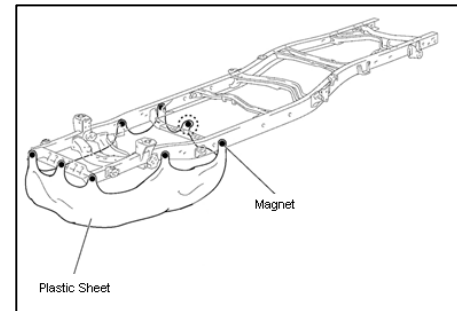
Step 2: Vehicle Preparation. Dealers will employ the following procedures to prepare their service areas and vehicles for spraying.

- Remove truck bed assembly.
- Clean frame, if necessary. It may be necessary to clean the frame, 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 (e.g., tires and wheels, spare tire, engine under cover).
- 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, wire brush, and/or compressed air.
- Mask parts. Mask areas not to be sprayed (e.g., drive shaft, brake/hub assemblies, exhaust).
- Attach Plastic Sheet: To capture any 712AM that may drip through small holes in the frame, use magnets to suspend a plastic sheet underneath the front portion of the frame.

Tundra on Lift with Bed Removed



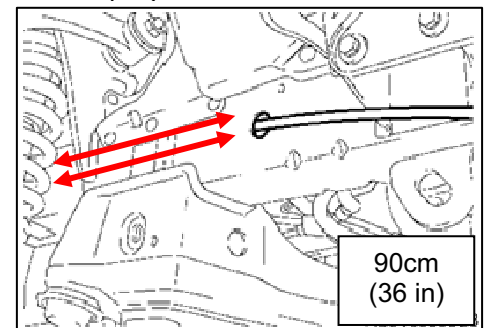
Attachment of Plastic Sheet to Capture any 712AM Drips



Step 3: CRC Application. Dealers will apply the Corrosion Resistant Compounds as follows:

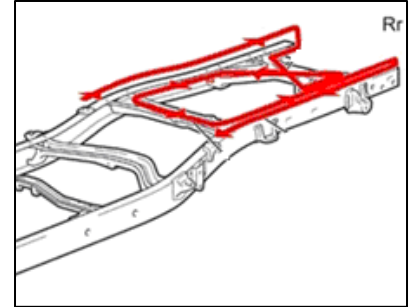
- Apply 712AM. Set up Vaupel spray gun and insert 360° spray nozzle a specified distance into selected holes in the frame. Press spray gun trigger and pull out nozzle at fixed speed while spraying interior surface of frame with one liter of 712AM. When finished, insert rubber plugs and foam blocks to keep 712AM in the frame.

360° Spray Wand Inserted into Frame



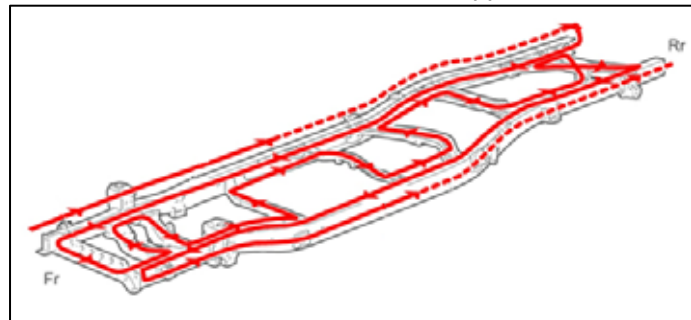
- Remove plastic sheet suspended from frame.
- Lower lift. Lower the lift until the top of the rear portion of the frame is approximately 4'6" above the floor.
- Apply Noxudol 300 S to top external surface of rear portion of frame.
Set up Vaupel spray gun and locate unidirectional handheld spray nozzle 4-8 inches from frame surface. Press spray gun trigger and spray Noxudol 300 S on the top of rear portion of the frame by moving spray nozzle at fixed speed across frame surface.
- Reattach truck bed assembly.

*Top Surface of Rear Frame Portion
Where Noxudol 300 S is Applied*



- Raise truck on lift.
- Apply Noxudol 300 S to frame bottom and side external surfaces. From the same working distance, press spray gun trigger and apply remaining Noxudol 300 S to bottom and side external surfaces of entire frame at fixed speed. Refill spray gun with Noxudol 300 S as needed until all three (3) liters of material are used.

*Side and Bottom Surfaces of Frame
where Noxudol 300 S is Applied*



- Final steps. Reinstall components of vehicle; remove all masking; remove truck from lift; and spray Noxudol 300 S on areas of frame previously covered by lift arms. Allow 712AM and Noxudol 300 S to dry overnight before returning vehicle to customer. Comply with any recordkeeping and material handling requirements.

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:
Date of Preparation: November 14, 2007

Revised: March 17, 2011
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, CO₂, 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.



MATERIAL SAFETY DATA SHEET

Noxudol 300 S

Last Updated April 18, 2011

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
Verkstadsgratan 3
S-434 42 Kungsbacka
Sweden
www.auson.se

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

PHONE: +46 300-562000
FAX: +46 300-562001

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

<u>Chemical Name</u>	<u>Amount % by Wt.</u>	<u>CAS Number</u>	<u>OSHA PEL (ppm)</u>	<u>ACGIH STEL (ppm)</u>
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/(%SiO ₂ +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):

MINIMUM 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



MATERIAL SAFETY DATA SHEET

Noxudol 300 S

Last Updated April 18, 2011

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.

64741-88-4

CHEMICAL NAME

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



MATERIAL SAFETY DATA SHEET

Noxudol 300 S

Last Updated April 18, 2011

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/(%SIO ₂ +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	

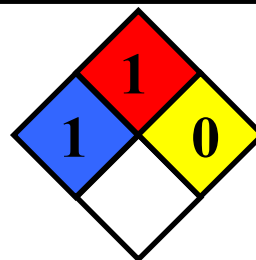


MATERIAL SAFETY DATA SHEET

Noxudol 300 S

Last Updated April 18, 2011

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)

Part Number: --

Approved By: Soken Trade Corporation

Approval Date: April 18, 2011

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

(This page intentionally left blank.)

ATTACHMENT 2: DESCRIPTION OF LOCATION WHERE THE BOD WILL TAKE PLACE AT [INSERT NAME OF DEALERSHIP]

- We will conduct the BOD in our existing dealership service area located at [Insert Dealer Address]. Our dealership has a valid certificate of occupancy for vehicle service and is compliant with existing fire, building, mechanical, and zoning codes for vehicle service/repair garages.

Insert description of the service area at your dealership where the BOD will be conducted.

- We will store BOD materials in accordance with applicable codes governing the storage of combustible liquids.

Insert a description of the storage area to be used for BOD materials.

- We will ensure that the BOD is conducted in an area that has adequate ventilation.

Insert a description of the method of ventilation in the vehicle service area where the BOD will be conducted.

(This page intentionally left blank.)

**TUNDRA CORROSION-RESISTANT COMPOUND CAMPAIGN B0D
TENNESSEE/VIRGINIA DEALER INFORMATION PACKET
(FOR TENNESSEE DEALERS SERVICING VIRGINIA-REGISTERED TUNDRAS)**

GUIDE TO FEDERAL, STATE AND LOCAL REQUIREMENTS

HAZARDOUS WASTE MANAGEMENT SECTION

The materials used in the Tundra B0D – 712AM and Noxudol 300 S – are not considered hazardous waste when they are discarded. In addition, as is the case for the Tacoma LSC 90D, the B0D spray guns do not need to be cleaned as long as you store them in accordance with the Technical Instructions. Therefore, the B0D should not generate any hazardous waste and any discarded materials used exclusively for performing the B0D – such as the plastic sheet suspended from the frame or the plastic bags used to cover the brake assemblies during spraying – do not need to be managed as hazardous waste. Such B0D-exclusive waste will not count toward your monthly hazardous waste generation totals.

However, one of the materials used in the LSC 90D – X128T – may be considered a hazardous waste when discarded due to its combustibility. Therefore, if, as we assume, the B0D will occur in the same spray space as the LSC 90D, there may be common materials, such as floor tarps and rags used for cleanup, that if discarded will need to be managed as hazardous waste. Such materials will count toward your monthly waste generation totals and may impact your generator status.

To ensure proper waste handling, you should develop a procedure at your dealership for distinguishing between 3 categories of waste: (1) B0D-only, (2) LSC 90D-only, and (3) combined B0D and LSC 90D wastes. Categories (2) and (3) will need to be managed as hazardous waste, while Category (1) will not. To assist in your compliance, this section provides a brief overview of the hazardous waste requirements applicable to dealerships generally.

Regulatory Note Regarding EPA ID Number: *Prior to beginning the LSC 90D, your dealership should have obtained an EPA Hazardous Waste ID Number if it did not already have one. Although the B0D should not generate any hazardous waste, as discussed above, if you conduct the B0D in the same spray space as the LSC 90D you will need to manage any 90D-only or B0D-90D combined waste from the common B0D-LSC 90D spray space as hazardous waste, which requires an EPA Hazardous Waste ID Number. The EPA ID Number requirement applies to each location at your dealership with a separate mailing address. If you do not have an EPA Hazardous Waste ID Number for the building where the B0D and LSC 90D will be conducted, the LSC 90D Dealer Information Packet explains how to obtain one.*

Regulatory Note Regarding B0D Tarps and Partitions: *If, as we assume, the LSC 90D and B0D are conducted in a common spray space, the tarps/partitions used should be managed like other hazardous waste when you dispose of them. The weight of these tarps counts against the monthly hazardous waste management limits noted in Section 3 below. Given their size and weight, the tarps/partitions could represent a large quantity of waste if disposed of frequently and could impact your compliance with the limits noted below. Therefore, we recommend that you reuse the tarps and other materials used to create the partitions described in the **Technical Instructions**.*

1. **IF YOU ARE ALREADY A REGISTERED SMALL QUANTITY GENERATOR (SQG) (I.E., BECAUSE YOU GENERATE MORE THAN 220 POUNDS OF HAZARDOUS WASTE PER MONTH), YOU MAY STOP READING AS YOU ARE LIKELY ALREADY FAMILIAR WITH THE REQUIREMENTS NOTED BELOW. THE B0D WILL NOT IMPACT YOUR GENERATOR STATUS.**
2. **IF YOU ARE NOT A SMALL QUANTITY GENERATOR, DO NOT GENERATE MORE THAN 220 POUNDS OF HAZARDOUS WASTE PER MONTH, OR ACCUMULATE MORE THAN 2,200 POUNDS OF HAZARDOUS WASTE AT ANY TIME, THE B0D WILL NOT IMPACT YOUR GENERATOR STATUS.**

- a. Your dealership will not have to become a registered SQG (and thereby be subject to additional requirements) if you stay below the two registered SQG triggers:
 - (1) Generate no more than 220 pounds of hazardous waste in a calendar month; and
 - (2) Accumulate no more than 2,200 pounds of hazardous waste at any one time.

Important Compliance Note. *The 220 pounds per month waste generation level and the 2,200 pounds accumulation level apply separately to each part of your dealership that has its own address and its own EPA ID Number.*

3. **STORE ALL HAZARDOUS WASTES IN PROPER CONTAINERS WITH PROPER LABELS, AND MAINTAIN REQUIRED RECORDS.**
4. **DISPOSE OF ALL HAZARDOUS WASTE ONLY AT FACILITIES AUTHORIZED TO RECEIVE "HAZARDOUS" WASTE USING A COMPANY LICENSED TO TRANSPORT SUCH WASTE TO THE DISPOSAL FACILITY.**
5. **REMEMBER TO COUNT USED OIL AGAINST YOUR MONTHLY HAZARDOUS WASTE LIMIT IF YOU DETERMINE IT TO BE HAZARDOUS.**

- a. In Tennessee, used oil generally must be managed as hazardous waste if it is been mixed with hazardous waste and exhibits a hazardous waste characteristic. As a result, used oil - if it meets this condition - must be counted towards the 220 pounds per month level for exemption from more significant regulated waste requirements.

- b. Such material regulated as used oil should be recycled in accordance with applicable used oil regulations. We assume that your dealership generates used oil, and therefore, is already familiar with the special hazardous waste recycling requirements for used oil.

(This page intentionally left blank.)



TO: TOYOTA OF BRISTOL AND KINGSPORT DEALER PRINCIPALS, SERVICE MANAGERS AND PARTS MANAGERS

DATE: 2011

RE: Information Packet for Corrosion-Resistant Compound (CRC) Campaign B0D

TUNDRA CORROSION-RESISTANT COMPOUND CAMPAIGN B0D

**TENNESSEE/VIRGINIA DEALER INFORMATION PACKET
(FOR TENNESSEE DEALERS SERVICING
VIRGINIA-REGISTERED TUNDRAS)**

This bound volume contains two parts of the Tennessee/Virginia Dealer Information Packet for the Tundra **Corrosion-Resistant Compound (CRC)** Campaign B0D—the **Getting Started Guide** and the **Guide to Federal, State and Local Requirements**. The third part—the **Technical Instructions**—is bound separately.

IMPORTANT NOTE: The Tundra B0D (described in this **Dealer Information Packet** and the **Technical Instructions** that accompany it) covers Toyota Tundra trucks registered in CT, DE, IL, IN, KY, MA, MD, ME, MI, MN, NH, NJ, NY, OH, PA, RI, VA, VT, WI, and WV. You are receiving this Packet because we understand that due to your dealership's proximity to Virginia, a substantial number of Tundras registered in Virginia are serviced at your dealership. This Campaign **ONLY** covers those **B0D-eligible vehicles** serviced at your dealership that are **REGISTERED IN VIRGINIA**.

IMPORTANT – PLEASE READ

(This page intentionally left blank.)

TABLE OF CONTENTS

	<u>Page</u>
TENNESSEE/VIRGINIA DEALER INFORMATION PACKET	3
GETTING STARTED GUIDE.....	5
STEP 1: SITE SELECTION	5
STEP 2: AIR PERMITTING EXEMPTION	6
STEP 3: CONTACT LOCAL FIRE OFFICIAL	7
STEP 4: COMPLETE B0D READINESS SURVEY	8
STEP 5: AIR RECORDKEEPING	8
STEP 6: HAZARDOUS WASTE MANAGEMENT	9
HOW TO IMPLEMENT THE B0D	11
SITE SELECTION SECTION	13
GUIDE TO FEDERAL, STATE AND LOCAL REQUIREMENTS.....	17
AIR REGULATIONS SECTION	21
AIR PERMITTING REQUIREMENTS: ARE YOU EXEMPT	21
AIR REGULATORY REQUIREMENTS: UNDERSTANDING HOW THEY WILL APPLY TO YOUR DEALERSHIP	23
AIR REGULATORY REQUIREMENTS: YOUR RECORDKEEPING OBLIGATIONS.....	26
AIR RECORDKEEPING SECTION	29
FIRE, BUILDING AND ZONING CODES SECTION	77
TABLE 1: CODE SUMMARY FOR TENNESSEE LOCATIONS	83
APPENDIX A: NFPA COMPLIANCE MATERIALS.....	85
APPENDIX A1: NFPA FIRE CODE SUMMARY	87
APPENDIX A2: NFPA MODEL LETTER	89
HAZARDOUS WASTE MANAGEMENT SECTION.....	115

(This page intentionally left blank.)



TO: TOYOTA OF BRISTOL AND KINGSPORT DEALER PRINCIPALS, SERVICE MANAGERS AND PARTS MANAGERS

DATE: 2011

RE: Information Packet for Tundra Corrosion-Resistant Compound Campaign B0D

**TUNDRA CORROSION-RESISTANT COMPOUND CAMPAIGN B0D
(FOR TENNESSEE DEALERS SERVICING
VIRGINIA-REGISTERED TUNDRAS)**

TENNESSEE/VIRGINIA DEALER INFORMATION PACKET

Toyota is launching a Corrosion-Resistant Compound (CRC) Campaign for 2000-2003 model year (MY) Tundra vehicles registered in certain cold climate states with high road salt use ("Cold Climate States"). This Campaign consists of two components:

- (1) The next phase of Safety Recall 90M announced in November 2009 affecting the rear portion of the frame. Under this next phase, owners of covered vehicles will receive a CRC application to the rear portion of the frame as part of the remedy for the identified condition.
- (2) A Customer Satisfaction Program to address the potential for greater than expected levels of corrosion to the front portion of the frame in these vehicles.

For ease of reference only, this Dealer Information Packet will refer to the entire CRC Campaign for the 2000-2003 MY Tundras by the internal designation assigned to this next phase of Safety Recall 90M – "B0D".

This Dealer Information Packet will help you prepare for and conduct the Tundra B0D by addressing federal, state and local laws that apply to spray application of CRCs. Your dealership should already be familiar with these laws and with the format of this Packet as a result of conducting the Tacoma Limited Service Campaign (LSC) 90D.

For the Tundra B0D, you will also be using the Vaupel HSDR 3300 spray gun to apply two CRCs to the interior and exterior of the frame:

- **Frame Internal Surfaces:** The interior CRC for the Tundra B0D will be the same 712AM material being used for the Tacoma LSC 90D, and you will be using the same Vaupel HSDR 3300 issued to you for LSC 90D.
- **Frame External Surfaces:** The exterior CRC for the Tundra B0D will not be X128T (now being used in Tacoma LSC 90D), but a different material known as "Noxudol 300 S". You will be issued one additional Vaupel HSDR 3300 to apply the Noxudol 300 S for the Tundra B0D.

As with the Tacoma LSC 90D, the Tundra B0D CRCs contain Volatile Organic Compounds

IMPORTANT – PLEASE READ

(VOCs), Particulate Matter (PM) and other substances that are subject to federal, state and/or local laws related to ***air emissions, fire code approval, waste generation and recordkeeping***. However, Noxudol 300 S contains lower VOCs than X128T and is a Class IIIB, instead of a Class II, liquid. As a result, the Tundra B0D will pose different -- and generally less stringent -- compliance obligations under federal, state and/or local laws. Your dealership will be able to ***comply with these laws without significant burdens on your business*** as long as you follow the steps discussed in this Packet. Therefore, please review this entire Information Packet with your service and parts staff ***BEFORE*** you begin conducting the B0D.

This Packet consists of three parts, contained in two bound booklets:

1. **“GETTING STARTED GUIDE”**: **Gets you started by reviewing the steps your dealership needs to take to comply with federal, state and local laws.**
2. **“GUIDE TO FEDERAL, STATE AND LOCAL REQUIREMENTS”**: **Reviews in more detail relevant federal, state and local laws. Also provides compliance tools.**
3. **“TECHNICAL INSTRUCTIONS”**: **Contains detailed technical instructions that you should follow at all times.**

IMPORTANT

Use Same Spray Space for LSC 90D and B0D: Toyota is advising its dealers to conduct the Tundra B0D in the same spray space now being used to conduct the Tacoma LSC 90D. **If you are not able to use the existing Tacoma LSC 90D spray space for the Tundra B0D, then your compliance obligations may be different than what is covered in this Packet.** Therefore, in the event you are not able (or believe you might not be able) to use the existing LSC 90D spray space, please call the C.L.E.A.N. Dealer EH&S Hotline at (877) 572-4347 immediately to discuss your particular situation.

Notify Your Local Fire Code Enforcement Official: Your dealership should have applied for and already obtained approval from your local fire code enforcement official to conduct the Tacoma LSC 90D. **You will need to notify your local fire code enforcement official that you plan to conduct the Tundra B0D in the same spray space as LSC 90D.** This Packet provides information to help you provide such notification.

If you are not able to use the Tacoma LSC 90D spray space for the Tundra B0D, then you will need to identify an appropriate spray space for the Tundra B0D and then you will need to contact your local fire code enforcement official for approval. If you are facing this situation, you also may wish to seek approval from your local fire code enforcement official to re-locate your LSC 90D spray space so that you can use the same space for both campaigns. Before proceeding, please call the C.L.E.A.N. Dealer EH&S Hotline at (877) 572-4347 to discuss your particular situation.

**TUNDRA CORROSION-RESISTANT COMPOUND CAMPAIGN B0D
TENNESSEE/VIRGINIA DEALER INFORMATION PACKET
(FOR TENNESSEE DEALERS SERVICING VIRGINIA-REGISTERED TUNDRAS)**

GETTING STARTED GUIDE

***Where Will You Conduct The B0D?** This **Getting Started Guide** assumes that you will conduct the Tundra B0D in the same spray space currently being used to conduct the Tacoma LSC 90D. If you are unable to do so, please call the C.L.E.A.N. Dealer EH&S Hotline (877-572-4347), for assistance.*

PLEASE READ THIS GETTING STARTED GUIDE CAREFULLY SO THAT YOU UNDERSTAND THE STEPS YOUR DEALERSHIP SHOULD TAKE TO COMPLY WITH THE APPLICABLE LEGAL REQUIREMENTS:

- **BEFORE** beginning the Tundra B0D (see **Steps 1, 2, 3 and 4** below); and
- **WHILE** conducting the Tundra B0D (see **Steps 5 and 6** below).

IMPORTANT NOTE: The Tundra B0D (described in this **Dealer Information Packet** and the **Technical Instructions** that accompany it) covers Toyota Tundra trucks registered in CT, DE, IL, IN, KY, MA, MD, ME, MI, MN, NH, NJ, NY, OH, PA, RI, VA, VT, WI, and WV. You are receiving this Packet because we understand that due to your dealership's proximity to Virginia, a substantial number of Tundras registered in that state are serviced at your dealership. This Campaign **ONLY** covers those **vehicles** serviced at your dealership that are **REGISTERED IN VIRGINIA**.

STEP 1 – BEFORE YOU BEGIN APPLYING TUNDRA B0D CRCs, PLEASE CONFIRM THAT YOUR SPRAY SPACE IS APPROPRIATE

To ensure that the Tundra B0D is conducted in compliance with all applicable regulatory requirements, you need to ensure that the existing CRC spraying space for the Tacoma LSC 90D meets certain minimum requirements, and if so, then notify the appropriate fire code enforcement official that you intend to use this space for the Tundra B0D. Your existing spray space for Tacoma LSC 90D should meet regulatory requirements if it is large enough and has a lift that will accommodate a Tundra. If you cannot use the existing LSC 90D spray space for the Tundra B0D, you will need to establish a new spray space and contact your local fire code enforcement official for approval. If you are facing this situation, *please call the C.L.E.A.N. Dealer EH&S Hotline (877-572-4347) for assistance.* Go to the Site Selection Section for more information. If you are facing this situation, *please call the C.L.E.A.N. Dealer EH&S Hotline (877-572-4347) for assistance.*

Go to the Site Selection Section for more information.

IMPORTANT – PLEASE READ

STEP 2 – BEFORE APPLYING THE TUNDRA B0D CRCs, CONFIRM THAT YOUR DEALERSHIP CAN CONDUCT B0D CONCURRENTLY WITH THE TACOMA LSC 90D WITHOUT TRIGGERING AIR PERMITTING REQUIREMENTS

Do You Already Have An Air Permit? *If your dealership already has an air permit, then you may need to obtain a modification to that permit before proceeding with the Tundra B0D. If you have an air permit, please stop reading this Information Packet and go to the C.L.E.A.N. Dealer website (<http://cleandealer.com>), or call the EH&S Hotline (877-572-4347), for assistance.*

The B0D CRC materials contain Volatile Organic Compounds (VOCs), Particulate Matter (PM) and other substances subject to federal and state air quality laws. Generally, these laws allow emissions up to a certain level and require a facility, if it wishes to exceed that level, to obtain an air permit from the state.

We assume that your dealership is currently exempt from air permitting. Your dealership can conduct the Tundra B0D and remain exempt from air permitting so long as:

(1) Your Potential to Emit (PTE) for the Tundra B0D for any air contaminant does not exceed 5 tons per year (tpy) (The “Insignificant Activity” Exemption).

- a. **Toyota of Bristol:** Your B0D PTE for all air contaminants combined is 0.07 tons, well below the 5 tpy limit. (See the Air Recordkeeping Section.)
- b. **Toyota of Kingsport:** Your B0D PTE for all air contaminants combined is 0.04 tons, well below the 5 tpy limit. (See the Air Recordkeeping Section.)

Note: The PTE is calculated solely on Tundra Vehicles in your PMA that are registered in Virginia.

(2) 30 days before you intend to start the Tundra B0D, you must send a notification to the Tennessee Air Pollution Control Board (TAPCB) requesting its determination that the B0D is an “insignificant activity”. You MAY NOT start the Tundra B0D until you receive a written response from TAPCB confirming that the B0D is an insignificant activity.

For more information and a form of notification for you to submit to TAPCB, please go to the Air Regulations Section and Air Recordkeeping Section. **If you cannot satisfy the criteria noted above, please go to C.L.E.A.N. Dealer website (<http://cleandealer.com>) or call the EH&S Hotline (877-572-4347) for more information.**

How Can I Learn More? Please see the **Air Regulations Section** of the Guide to Federal, State and Local Requirements for a full discussion of air permitting requirements and the **Air Recordkeeping Section** of the Guide to Federal, State and Local Requirements for tools that your dealership can use to assure compliance.

STEP 3 – BEFORE YOU BEGIN APPLYING THE TUNDRA B0D CRCs, (1) CONTACT THE APPROPRIATE FIRE CODE ENFORCEMENT OFFICIAL TO NOTIFY HIM/HER OF YOUR INTENTION TO CONDUCT THE TUNDRA B0D IN THE SAME SPRAY SPACE BEING USED FOR THE TACOMA LSC 90D; AND (2) MAKE SURE THAT YOUR DEALERSHIP CAN CONDUCT THE TUNDRA B0D IN COMPLIANCE WITH FIRE, BUILDING AND ZONING CODES

The B0D CRCs are Class IIIB combustible materials. State and local fire codes apply to the use of combustible materials. Building and zoning codes also may apply.

Your dealership can make its own choices about how best to comply with these codes. To assist you, however, we have prepared a detailed review of these requirements for your reference, which can be found in the **Fire, Building and Zoning Codes Section** of the **Federal, State and Local Requirements Guide**. You should be able to satisfy these requirements as long as you:

1. **NOTIFY YOUR LOCAL FIRE CODE ENFORCEMENT OFFICIAL IN WRITING, OF YOUR INTENTION TO CONDUCT TUNDRA B0D IN THE SAME SPACE BEING USED FOR TACOMA LSC 90D.**

What Do I Need To Give My Local Fire Code Enforcement Official? Appendix A to the **Fire, Building and Zoning Codes Section** contains all of the materials that you will need to give to your local fire code enforcement official, except **that you will need to add some information about the spray space location at your dealership.**

YOU MUST SEND THESE MATERIALS BEFORE CONDUCTING THE TUNDRA B0D.

2. **CONFIRM THAT YOU CAN CONDUCT THE TUNDRA B0D IN COMPLIANCE WITH BUILDING, ZONING AND FIRE CODE REQUIREMENTS.**

How Do I Confirm Compliance With Building, Zoning and Fire Code Requirements? The Fire, Building and Zoning Codes Section provides a detailed review of these requirements and includes a Table 1 that allows you to look up the city or county where you will conduct the B0D and see whether it has any additional requirements applicable to the B0D.

STEP 4 – COMPLETE THE B0D READINESS SURVEY

You must complete the **B0D Readiness Survey** available at the C.L.E.A.N. Dealer website (<http://cleandealer.com>) to confirm your readiness to start the B0D. Toyota will then automatically ship one additional Vaupel HSDR 3300 spray gun (for the Noxudol 300 S material) to you at no charge.

After We Complete Steps 1, 2, 3, and 4 Can We Start the B0D CRC application?

Yes, **BUT** make sure to follow:

- The detailed **Technical Instructions for the Tundra B0D**, and
- Step 5 (compliance with hourly Allowable PM Emissions Rate and air permitting exemption records), and
- Step 6 (comply with hazardous waste requirements). You should also review the **Guide to Federal, State and Local Requirements** to better understand the legal requirements for Steps 1, 2, 3, and 4.

STEP 5 – COMPLY WITH HOURLY ALLOWABLE PM EMISSIONS RATES AND KEEP AIR REGULATORY COMPLIANCE RECORDS

To ensure compliance with hourly Allowable PM Emissions Rates applicable to the Tundra and Tacoma processes, **you should NOT process a total of more than one Tundra every 2 hours and more than one Tacoma every 1 hour.** Also, you will be required to maintain records in your dealership's files showing that you are exempt from the air permitting and are complying with air regulations.

Tennessee regulations impose an allowable hourly emissions rate for particulate matter (PM) on each process. Due to differences in the external CRC being used and in the spray application times, Tundra B0D and LSC 90D do not have the same hourly Allowable PM Emissions Rate, and therefore, the number of vehicles that can be processed per hour varies between the two programs.

Tundra B0D: The Allowable PM Emissions Rate for the Tundra B0D process is 0.076 pounds per hour. As long as your dealership conducts the Tundra B0D in accordance with the Technical Instructions, the B0D should have PM emissions of no more than 0.047

pounds per hour, and therefore, will fall below this Allowable PM Emissions Rate. However, this PM emissions level of 0.047 pounds per hour assumes it will take roughly 2 hours to apply both CRCs (*i.e.*, 712AM and Noxudol 300 S) to a Tundra; if a Tundra were processed in a shorter amount of time, then the hourly PM emissions rate could be higher. Thus, to ensure compliance with the 0.076 pounds per hour Allowable PM Emissions Rate, ***your dealership should not process more than one Tundra every 2 hours.***

Tacoma LSC 90D: The Allowable PM Emissions Rate for the 90D process is 0.12 pounds per hour. As long as your dealership conducts the Tacoma 90D in accordance with the Technical Instructions, the 90D should have PM emissions of no more than 0.068 pounds per hour, and therefore, will fall below this Allowable PM Emissions Rate.¹ However, this potential PM emissions level of 0.068 pounds per hour assumes it will take roughly 1 hour to apply both CRCs (*i.e.*, 712AM and X128T) to the Tacoma; if a Tacoma were processed in a shorter amount of time, then the hourly PM emissions rate could be higher. Thus, to ensure compliance with the 0.12 pounds per hour Allowable PM Emissions Rate, ***your dealership should not process more than one Tacoma every 1 hour.***

Record Keeping: You will be required to maintain records in your dealership's files showing that you qualify for the Insignificant Activity Exemption (discussed in Step 2 above) and are complying with air regulations. The Air Recordkeeping Section of the **Guide to Federal, State and Local Requirements** has instructions regarding the records that you must retain in relation to a determination that the B0D is exempt from permitting requirements.

STEP 6 – COMPLY WITH HAZARDOUS WASTE REQUIREMENTS

You will need proper procedures in place for distinguishing between B0D-only and combined LSC 90D/B0D waste.

The B0D spray guns (for use with Noxudol 300 S and 712AM) do not need to be cleaned and the B0D materials are not “hazardous waste” when discarded. Therefore, the B0D will not generate hazardous waste and it should not impact your dealership's waste generator status (*e.g.*, whether you are a Small Quantity Generator or a Conditionally Exempt Small Quantity Generator of hazardous waste).

However, as described in your Tacoma LSC 90D Dealer Information Packet, one of the materials used in the LSC 90D – X128T – could be hazardous waste when discarded. As a result, the LSC 90D Dealer Information Packet advises that: 1) if you frequently dispose of the tarps (*e.g.* floor coverings) and/or the partition materials used in your LSC 90D work

¹ Since sending the Tacoma LSC 90D Dealer Information Package in 2009, TMS has adopted a more conservative approach to calculating the allowable PM emissions rate. Only the revised emission rates are presented here. Under either calculation you should be in compliance with this requirement if you process no more than one Tacoma per hour.

area, you will generate a larger quantity of waste, which may impact your generator status; and 2) you should manage any excess quantities of the LSC 90D materials and/or rags used to clean up any LSC 90D materials in the same manner as other hazardous waste at your dealership.

If, as we assume, you conduct the B0D in the same work area as the LSC 90D, any discarded floor tarps, partitions or other items used to clean up the common work area (e.g. rags) may contain X128T and should therefore be managed as hazardous waste. However, any materials used ONLY in the B0D, such as the plastic sheet secured to the Tundra frame when applying 712AM, should not need to be managed as hazardous waste so long as they contain no X128T waste. You should develop a waste handling procedure suitable to your operation that will ensure LSC 90D waste and combined LSC 90D/B0D waste are managed as hazardous waste.

HOW TO IMPLEMENT THE B0D

Step 1: Confirm that your existing Tacoma LSC 90D spray space is an appropriate spray space for Tundra B0D.

Toyota is advising its dealers to **conduct the Tundra B0D in their existing Tacoma LSC 90D spray space**. If you cannot use this existing spray space for B0D, please call the C.L.E.A.N. Dealer EH&S Hotline at (877) 572-4347 to discuss your particular situation.

Step 2: Make sure you can conduct the Tundra B0D concurrently with the Tacoma LSC 90D without triggering air permitting requirements.

Your dealership will be exempt from air permitting requirements if its PTE for the Tundra B0D for each air contaminant is less than 5 tpy. For this exemption to apply, **at least 30 days** before you intend to start the Tundra B0D, **you must send a notification** to the Tennessee Air Pollution Control Board (TAPCB) requesting that it designate the B0D as an "insignificant activity". **You MAY NOT start the B0D until you receive a written response from TAPCB confirming that the B0D is an insignificant activity.**

Step 3: Notify Your Local Fire Official in Writing of Your Intention to Conduct the Tundra B0D in the Same Spray Space Being Used For the Tacoma LSC 90D, and Confirm Your Compliance with Building and Zoning Code Requirements.

See Fire, Building and Zoning Codes Section of this Packet for compliance and contact information.

Step 4: Complete the B0D Readiness Survey

Please **complete the B0D Readiness Survey** available at the C.L.E.A.N. Dealer website (<http://cleandealer.com>) to confirm your readiness to start the B0D. Toyota will then automatically ship one additional Vaupel HSDR 3300 spray gun (for the Noxudol 300 material) to you at no charge.

AFTER COMPLETING STEPS 1, 2, 3 & 4 YOU CAN START APPLYING B0D MATERIALS

But you must **follow the Technical Instructions** and Steps 5 & 6 below.

Step 5: Comply with Hourly PM Emissions Rates and Keep Air Regulatory Compliance Records

To ensure compliance with hourly Allowable PM Emissions Rates applicable to the Tundra and Tacoma processes, **you should NOT process a total of more than one Tundra every 2 hours and more than one Tacoma every 1 hour**. Also, comply with the requirements in the Air Recordkeeping Section of this Packet to document that you are exempt from air permitting and are complying with air regulations.

IMPORTANT – PLEASE READ

Step 6: Comply with Hazardous Waste Requirements

Unlike Tacoma LSC 90D, Tundra B0D will not generate hazardous waste. Therefore, items used exclusively for B0D – such as plastic sheeting suspended from the front portion of the frame while applying 712 AM – will not, when discarded, need to be managed as hazardous waste. However, the LSC 90D does generate hazardous waste, and therefore, items being used for both the LSC 90D and B0D – such as floor tarps and clean up rags – will need, when discarded, to be managed as hazardous waste. Please continue to follow the instructions provided in the LSC 90D Dealer Information Packet for managing hazardous waste. Also, you will need proper procedures in place for distinguishing between B0D-only and combined LSC 90D/B0D waste.

The steps outlined above should help you ensure that your dealership conducts the B0D in compliance with the relevant federal, state and local legal requirements. You should use this **Getting Started Guide** along with the other parts of the B0D Dealer Information Packet – the **Guide to Federal, State and Local Requirements** and the **Technical Instructions**.

This Information Packet is not intended to cover other air, waste management, hazardous material, water or other environmental laws and regulations that might apply to non-B0D operations at your dealership. We assume that you already comply with other environmental, health and safety requirements that apply to your facility.

If you have any questions after reviewing this information or as you proceed, 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 Tundra Corrosion-Resistant Compound Campaign B0D.

Thank you for your cooperation.
TOYOTA MOTOR SALES, U.S.A., INC.

**TUNDRA CORROSION-RESISTANT COMPOUND CAMPAIGN B0D
TENNESSEE/VIRGINIA DEALER INFORMATION PACKET
(FOR TENNESSEE DEALERS SERVICING VIRGINIA-REGISTERED TUNDRAS)**

SITE SELECTION SECTION

Please carefully review the entire Dealer Information Packet – including this Site Selection Section – with your Service and Parts Staff.

Various state and local codes, such as, as one example, the local fire code, impose operational limitations on the Tundra B0D, including on the location where you may conduct it.

- If you conduct the B0D in the spray space already being used for the Tacoma LSC 90D, then this location should satisfy these state and local codes for the B0D.
- If not, however, then you will need to select a proper location to conduct the B0D. This Site Selection Section is designed to help you do so.

If you will use the same spray space, then you can skip the Site Selection Section.

If for some reason you cannot use the existing LSC 90D spray space for B0D, you will need to establish a new spray space. This spray space would have to meet the site selection criteria set forth below. Before selecting a new spray space and contacting the appropriate fire code enforcement official, please call the C.L.E.A.N. Dealer EH&S Hotline (877-572-4347) to discuss your particular situation.

SITE SELECTION CONSIDERATIONS

(If you are NOT able to use the existing LSC 90D Spray Space for the Tundra B0D)

1) B0D WORK AREA MUST COMPLY WITH BUILDING, MECHANICAL AND ZONING REQUIREMENTS (e.g., has a certificate of occupancy).

Your B0D work area should be located in an existing building/service area that complies with building/zoning/mechanical requirements. The B0D **may not** take place outdoors.

Note: The information in this Packet is not intended to cover building, zoning, mechanical or other environmental or occupational health and safety laws and regulations that might apply to non-B0D operations at your dealership. We assume that you already have systems in place to comply with any other environmental, health and safety requirements that apply to your dealership.

IMPORTANT – PLEASE READ

2) **YOUR B0D WORK AREA MUST HAVE ALL OF THE FOLLOWING:**

- a) **Adequate ventilation** (whether natural or mechanical);
Consideration should be given to: (1) locations/stalls near bay doors, other natural ventilation and/or areas with approved mechanical ventilation, and (2) where possible, locations at the end of a row of service bays and not in the middle.
- b) **Be at least 20 feet from:** (1) open flames and/or spark-producing equipment and appliances; and (2) any drying, curing, and/or fusion apparatus;
- c) The B0D work area must be located away from pits or other below-ground areas;
- d) The B0D work area must have a **suitable lift** that allows clear access to the vehicle's frame rails.
- e) The floor of the B0D work area must be covered by an approved, noncombustible, nonsparking, **fire retardant material**.
- f) **Fire extinguishers rated “B,” “AB,” or “ABC”** must be provided **within 30'** (even if the work area has an automatic fire protection system);²
- g) **Compressed air**;
- h) **Eyewash stations**;
- i) **Drop lights appropriate for** use during the spraying of **combustible liquids**;

3) **Any other equipment**, operational and/or building features **required by applicable law** or indicated in the **Material Safety Data Sheets (MSDSs)** for the B0D materials.

4) **ALL B0D WORK SHOULD BE CONDUCTED IN A PARTITION ENCLOSURE** such as those depicted in the **Technical Instructions**, which separates the B0D from other vehicles and work areas/stalls. We assume you will use the same enclosure used to conduct the Tacoma LSC 90D, so long as it is large enough to fit a Tundra.

To prevent the possible accumulation of combustible vapors, the partition enclosures depicted in the Technical Instructions should have sufficient open space (at least one foot) (12”) at the bottom of the partition to allow for ventilation. In certain spray spaces, such as an end bay space, it may be appropriate to use a partition enclosure with only three sides and to leave the fourth side open (against the end wall), thereby increasing ventilation in the work area.

² A fire extinguisher should be in the vicinity even if the B0D work area has an automatic fire protection system (e.g., sprinklers).

OTHER REQUIREMENTS TO CONSIDER

Other Legal Requirements

The B0D is subject to other federal, state and/or local laws and codes related to air emissions, fire code approval, waste generation and recordkeeping that impose other operational limitations on it. **Therefore, in addition to this Section you should carefully review the Technical Instructions and the rest of this Guide** (e.g., the Air Regulations, Fire, Building and Zoning, and Hazardous Waste Management Sections).

B0D Material Storage

You may not store more than 25 gallons of combustible materials (including the B0D materials) in any fire area at your dealership. A fire area is any area in your dealership separated from the remainder of the building by construction and openings that have fire resistance ratings of at least 1 hour. *You may only exceed this 25 gallon limit if the materials are stored in a fire cabinet. If you are using a fire cabinet you may store up to 120 gallons in any one cabinet and have up to 3 cabinets in any one fire area at your dealership.*

* * * * *

(This page intentionally left blank.)



TO: TOYOTA OF BRISTOL AND KINGSPORT DEALER PRINCIPALS, SERVICE MANAGERS AND PARTS MANAGERS

**TUNDRA CORROSION-RESISTANT COMPOUND CAMPAIGN B0D
TENNESSEE/VIRGINIA DEALER INFORMATION PACKET
(FOR TENNESSEE DEALERS SERVICING VIRGINIA-REGISTERED TUNDRAS)**

GUIDE TO FEDERAL, STATE AND LOCAL REQUIREMENTS

***Please review the entire Dealer Information Packet
-- including this Guide to Federal, State and Local Requirements --
with your Service and Parts staff.***

For the Tundra B0D, you will be using the same kind of spray gun – the Vaupel HSDR 3300 spray gun – as is being for Tacoma LSC 90D, to apply two CRCs to the interior and exterior of the frame.

- The interior CRC for B0D will be the same 712AM material being used for the Tacoma LSC 90D, and you will use the same Vaupel HSDR 3300 issued to you for LSC 90D to apply the 712AM to Tundra internal frame surfaces for the B0D.
- The exterior CRC for B0D will be a material known as “Noxudol 300 S”. You will be issued one additional Vaupel HSDR 3300 to apply the Noxudol 300 S for B0D.

Air emissions will occur during your application of these materials. Under these circumstances the following federal, state and local legal requirements will apply to the B0D:

- Air Quality Under Tennessee Department of Environment & Conservation (TDEC) Regulations and
- Spraying & Storage of Combustible Liquids Under State and Local Fire, Building, and Zoning Codes.

We assume that you will use the same spray space for the Tacoma LSC 90D and the Tundra B0D and that you will use the existing LSC 90D spray space for both campaigns. If for some reason the existing LSC 90D spray space will not work for the B0D, you must relocate the spray space before contacting your local fire code enforcement official for approval, but before doing so, please call the C.L.E.A.N. Dealer EH&S Hotline at (877) 572-4347 to discuss your particular situation.

IMPORTANT – PLEASE READ

The **Getting Started Guide** in the Dealer Information Packet provides a step-by-step overview of how to conduct the B0D so that your dealership will comply with these kinds of legal requirements. After you have reviewed the **Getting Started Guide** to familiarize yourself with these requirements, you should review this **Guide to Federal, State and Local Requirements**, which provides a more detailed discussion of these requirements and contains information and forms that you will need to comply with them.

This **Guide** has been organized with separate sections that address each of these kinds of legal requirements. These sections are labeled by topic so that you can easily review the information now and find the information later should questions arise when you are conducting the B0D. *Important pages that you must read are marked in red on the edge of the page. If you need additional information, you may refer to the other pages.*

This Guide to Federal, State and Local Requirements contains the following Sections:

1. **“AIR REGULATIONS” SECTION**

- c. The Air Regulations Section provides a detailed review of federal and state laws that will regulate air emissions from the Tundra B0D at your dealership. In general, these laws allow air emissions up to a certain level and require a facility, if it wishes to exceed that level, to request permission from the state through an air permitting process.
- d. We assume that your dealership currently has air emissions below air permitting levels, and therefore, is currently exempt from air permitting requirements. You should review the Air Regulations Section carefully to make sure that your dealership can conduct the B0D concurrently with the Tacoma LSC 90D and stay exempt from air permitting. As explained in that section, you can conduct the Tundra B0D and continue to stay exempt from air permitting if you comply with the requirements below:

- (1) **For Toyota of Bristol and Toyota of Kingsport:** The B0D must qualify as an “insignificant activity,” which means the potential to emit (PTE) for each air contaminant from the B0D must not exceed 5 tons per year (tpy). As explained in the Air Regulations Section, the PTE for all air contaminants from the B0D are well below this limit.
- (2) At least 30 days before you intend to start the B0D, you must send a notification to the Tennessee Air Pollution Control Board (TAPCB) requesting that it designate the B0D as an insignificant activity. You **MAY NOT** start the B0D until you receive a written response from TAPCB confirming that the B0D is an insignificant activity.

- e. If you will not be able to stay exempt from air permitting, or if you already have an air permit, please go to the C.L.E.A.N. Dealer website (<http://cleandealer.com>) or call the EH&S Hotline (877-572-4347) for more information

2. **“AIR RECORDKEEPING” SECTION**

The Air Recordkeeping Section contains the documents and records your dealership must maintain to comply with applicable record retention and availability requirements required by the Tennessee Air Pollution Control Board, in relation to a determination that the B0D is exempt from permitting requirements because it is an “insignificant activity.”

3. **“FIRE, BUILDING, AND ZONING CODES” SECTION**

- a. **The Fire, Building, and Zoning Codes Section reviews state and local fire, building, and zoning codes. In general, these codes apply due to the combustibility of the two B0D CRCs. You should review all of the information carefully to make sure that your dealership can conduct the B0D in compliance with these codes.**
- b. **IMPORTANT:** As explained at the Fire, Building, and Zoning Codes Section, prior to implementing the B0D, your dealership will need to contact your local fire code enforcement official in order to:
 - (1) Notify him/her that you plan to conduct the Tundra B0D in the same spray space as Tacoma LSC 90D.
- c. The Fire, Building, and Zoning Codes Section contains a letter and all of the technical information that you will need to provide to your local fire code enforcement official, except that you will need to add some information about the location at your dealership where you will conduct the B0D. If you have any questions or concerns relating to discussions with your local fire code enforcement official, please go to the C.L.E.A.N. Dealer website (<http://cleandealer.com>) or call the EH&S Hotline (877-572-4347) for assistance.

4. **“HAZARDOUS WASTE MANAGEMENT” SECTION**

- a. **The Hazardous Waste Management Section reviews the requirements that apply to hazardous wastes generated by your dealership generally. Please note that there are differences between B0D and LSC 90D wastes.**
- b. The materials used in the Tundra B0D – 712AM and Noxudol 300 S – are not considered “hazardous” waste when they are discarded. In addition, as is the case for the Tacoma LSC 90D, the Vaupel HSDR 3300 spray guns being used for B0D do not need to be cleaned as long as you follow the procedures in the Technical

Instructions for proper storage of the guns. Therefore, the B0D should not generate any hazardous waste and any items used exclusively for performing the B0D – such as the plastic sheet suspended from the frame or the plastic bags used to cover the brake assemblies during spraying – do not, when discarded, need to be managed as hazardous waste. Such B0D-exclusive waste will not count toward your monthly hazardous waste generation totals.

However, one of the materials used in the Tacoma LSC 90D – X128T – may be considered a hazardous waste when discarded due to its combustibility. Therefore, if, as we assume, the B0D will occur in the same spray space as the Tacoma LSC 90D, there may be common materials, such as floor tarps and rags used for cleanup, that if discarded will need to be managed as hazardous waste. Such materials will count toward your monthly waste generation totals and may impact your generator status. You should develop a procedure for your dealership to identify LSC 90D and joint LSC 90D/B0D waste as distinguished from B0D-only waste.

* * * * *

This **Guide to Federal, State and Local Requirements** is not intended to cover air, waste management, hazardous material, water or other environmental laws and regulations that might apply to non-LSC 90D operations at your dealership. We assume that you already have systems in place to comply with any other environmental, health and safety requirements that apply to your dealership.

If you have any questions after reviewing this information or as you proceed, please go to the C.L.E.A.N. Dealer website (<http://cleandealer.com>) or call the EH&S Hotline (877-572-4347) for assistance.

Thank you for your participation and cooperation in the Tundra Corrosion-Resistant Compound Campaign B0D.

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

**TUNDRA CORROSION-RESISTANT COMPOUND CAMPAIGN B0D
TENNESSEE/VIRGINIA DEALER INFORMATION PACKET
(FOR TENNESSEE DEALERS SERVICING VIRGINIA-REGISTERED TUNDRAS)**

GUIDE TO FEDERAL, STATE AND LOCAL REQUIREMENTS

AIR REGULATIONS SECTION

Do You Already Have A Major Source Air Permit? *If Yes, or if emissions from your operations approach 100 tpy of any regulated air pollutant, then you may need a major source permit or permit modification before conducting the B0D. If you have an air permit, please stop reading this Air Regulations Section and go to the C.L.E.A.N. Dealer website (<http://cleandealer.com>) or call the EH&S Hotline (877-572-4347) for assistance.*

I. AIR PERMITTING REQUIREMENTS: ARE YOU EXEMPT?

The B0D Corrosion-Resistant Compounds contain Volatile Organic Compounds (VOCs), and Particulate Matter (PM). These substances are subject to limits on emissions to air under federal and state laws. These laws allow air emissions up to a certain level. If a facility wishes to exceed that level, then it must obtain an air permit from the state.

Important: Air Emission Limits Apply To Your Entire Dealership. *The air permitting laws apply based on total emissions from an entire facility and not just from a particular building or location. For example, if your dealership's physical plant is distributed across multiple buildings, land parcels or physical locations, then the air emissions from all of those buildings and locations would have to be combined to determine whether the dealership's total air emissions are below 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.*

We assume that your dealership currently has air emissions below air permitting levels, and therefore, is currently exempt from air permitting. Your dealership can make its own choices about how best to conduct the B0D and stay exempt from air permitting. However, your dealership should be able to conduct the B0D and stay exempt from air permitting laws if you satisfy **1 through 4** below.

YOUR DEALERSHIP SHOULD NOT NEED AN AIR PERMIT IF:

(1) YOUR POTENTIAL TO EMIT (PTE) FOR THE B0D FOR ANY AIR CONTAMINANT DOES NOT EXCEED 5 TONS PER YEAR (TPY) (THE “INSIGNIFICANT ACTIVITY” EXEMPTION).³

(a) Toyota of Bristol: Your B0D PTE for all air contaminants combined is 0.07 tons, well below the 5 TPY limit. (See the Air Recordkeeping Section).

(b) Toyota of Kingsport: Your B0D PTE for all air contaminants combined is 0.04 tons, well below the 5 TPY limit. (See the Air Recordkeeping Section).

Note: The PTE is calculated solely on Tundra vehicles in your PMA that are registered in Virginia.

(2) 30 DAYS BEFORE YOU INTEND TO START THE B0D, YOU MUST SEND A NOTIFICATION TO THE TENNESSEE AIR POLLUTION CONTROL BOARD (TAPCB) REQUESTING THAT IT DESIGNATE THE B0D AS AN INSIGNIFICANT ACTIVITY. YOU MAY NOT START THE B0D UNTIL YOU RECEIVE A WRITTEN RESPONSE FROM TAPCB CONFIRMING THAT THE B0D IS AN INSIGNIFICANT ACTIVITY.

(3) YOUR DEALERSHIP DOES NOT HAVE AN ONSITE OR AN OFFSITE BODY SHOP.

Why Does It Matter If I Have A Body Shop? The state requires air emissions from your entire dealership to be combined to determine whether your dealership has air emissions below air permitting levels. Because a body shop will have higher air emissions than a regular vehicle service area, you can not be certain -- without further analysis -- that your dealership will remain exempt from air permitting after adding the B0D to its operations.

In particular, if your dealership has an onsite body shop, then the state will require you to combine the emissions from that onsite body shop with the emissions from all other activities at the dealership. In doing so, it may not be possible for your dealership to conduct the B0D (which would add to the air emissions already coming from your body shop) and stay exempt from air permitting. Moreover, the state might require you to combine emissions from an offsite body shop -- even if the body shop is not where you will conduct the B0D -- if that body shop has a sufficient interconnection to the rest of the activities at your dealership.

If your dealership has an onsite or an offsite body shop, please go to the C.L.E.A.N. Dealer website (<http://cleandealer.com>) or call the EH&S Hotline (877-572-4347) for assistance.

³

The 5 tpy permit exception threshold applies only to the PTE for the B0D and not from other activities or emissions units at your dealership.

(4) YOUR DEALERSHIP WILL CONDUCT THE B0D IN AN EXISTING SERVICE AREA.

Do I Have to Conduct the B0D in an Existing Service Area? No, but if you plan to conduct the B0D in another area (such as in an offsite body shop) or in another state, then you may not be able to stay exempt from air permitting and/or you may be subject to different requirements. As noted elsewhere in this Packet, we assume you will conduct the B0D in the same work area as the Tacoma LSC 90D. If the common B0D-LSC 90D spray space is not in an existing service area at your dealership, or you plan to conduct the B0D at an off-site location, please go to the C.L.E.A.N. Dealer website (<http://cleandealer.com>) or call the EH&S Hotline (877-572-4347) for more information.

How Can I Learn More About How These Air Permitting Exemption Requirements Will Apply To My Dealership? The discussion in Section II below provides further explanation of the air permitting exemption requirements. You should review it carefully to ensure that you understand the basis for these requirements and how they will apply to your dealership.

EVEN IF YOUR DEALERSHIP DOES NOT NEED AN AIR PERMIT, YOU MUST SATISFY OTHER AIR REGULATORY REQUIREMENTS:

- A. Comply with hourly PM Allowable Emissions Rates of 0.076 pounds per hour (Tundra B0D) and 0.12 pounds per hour (Tacoma LSC 90D) by limiting your hourly processing of:

1. TUNDRAS TO NO MORE THAN ONE TRUCK EVERY 2 HOURS AND
2. TACOMAS TO NO MORE THAN ONE TRUCK EVERY 1 HOUR.

II. AIR REGULATORY REQUIREMENTS: UNDERSTANDING HOW THEY WILL APPLY TO YOUR DEALERSHIP

1. Requirements To Qualify As Exempt from Air Permitting

a. Potential to Emit (PTE) for Each Regulated Air Contaminant from the B0D

- (1) The B0D qualifies as an insignificant activity in Tennessee because its potential to emit (PTE) for each air contaminant is less than 5 tpy, and therefore is exempt from Tennessee air permitting requirements unless the B0D, when combined with your dealership's other operations, would cause your dealership's PTE to exceed the "major source" thresholds for VOCs (100 tpy).
- (2) Your dealership MAY NOT start the B0D under this exemption until you have (i) sent a notification for designation of the B0D as an "insignificant activity" to the TAPCB, and (ii) received a

response from TAPCB confirming that the BOD is exempt from permitting.

b. **Potential To Emit (PTE) for VOCs: Stay Below 100 tpy “Major Source” Threshold**

- (1) Potential VOC emissions from all activities (both BOD and non-BOD) at your dealership must be less than 100 tpy to stay exempt from air permitting. Because the BOD has **potential** VOC emissions of less than 1 tpy based on the theoretical maximum number of Virginia-registered Tundras that could be treated at both Toyota of Bristol and Toyota of Kingsport, this means that all other activities at your dealership must not have combined potential VOC emissions greater than ~ 99 tpy.
- (2) Your dealership’s current PTE should be well below 99 tpy as long as you do not have substantial spraying operations similar to the BOD and/or use very large quantities of VOC-containing materials (i.e., in excess of 18,000 gallons per year). Should questions arise regarding the PTE of the BOD, the Air Recordkeeping Section of this Guide contains documents that provide the PTE calculations for the BOD. You should keep these documents in your files, but will not need to do anything with them unless requested to do so by the Tennessee Department of Environment & Conservation (TDEC). If you have any questions or concerns regarding your ability to meet this limit, please go to the C.L.E.A.N. Dealer website (<http://cleandealer.com>) or call the EH&S Hotline (877-572-4347).

c. **Potential to Emit (PTE) for Particulate Matter (PM): Stay Below 100 Tons Per Year:**

- (1) Potential PM emissions from all activities (both BOD and non-BOD) at your dealership must be less than 100 tpy to stay exempt from air permitting. Because the BOD has **potential** PM emissions of less than 1 tpy based on the theoretical maximum number of Virginia-registered Tundras that could be treated at both Toyota of Bristol and Toyota of Kingsport, this means that all other activities at your dealership must not have combined potential PM emissions greater than ~ 99 tpy.
- (2) Your dealership’s current PTE should be well below 99 tpy as long as you do not have substantial spraying operations similar to the BOD and/or use very large quantities of PM-containing materials. Should questions arise regarding the PTE of the BOD, the Air Recordkeeping Section of this Guide contains documents that provide the PTE calculations for the BOD. You should keep these documents in your files, but will not need to do anything with them

unless requested to do so by the Tennessee Department of Environment & Conservation (TDEC). If you have any questions or concerns regarding your ability to meet this limit, please go to the C.L.E.A.N. Dealer website (<http://cleandealer.com>) or call the EH&S Hotline (877-572-4347).

d. **Hazardous Air Pollutants:**

- (1) The B0D materials do not contain and will not emit hazardous air pollutants (HAPs), and therefore, do not trigger any requirements related to HAPs.

To Qualify as Exempt from Air Permitting, Do I Have to Consider My Entire Dealership's Operations or Only Operations at the Place Where I Will Conduct the B0D? Please remember that the air permitting exemption requirements cover YOUR ENTIRE DEALERSHIP and NOT just any buildings or locations where you will apply the LSC 90D and B0D materials. For example, if your dealership's physical plant is distributed across multiple buildings, land parcels or physical locations, all of those buildings and locations would be subject to the requirements identified above (e.g., the 100 TPY major source threshold for VOCs discussed above applies to all materials used anywhere at your dealership).

2. **Requirements To Limit Hourly Particulate Matter (PM) Emissions**

- a. Tennessee regulations impose an hourly allowable emissions rate for particulate matter (PM) on certain types of processes. This rate is calculated for each individual process based on a formula that requires determining the Process Weight Rate for the individual process and then multiplying a fraction of that Process Weight Rate by 3.59.
- b. Due to differences in the external CRC being used and in the spray application times, the Tundra B0D and the Tacoma LSC 90D do not have the same hourly Allowable PM Emissions Rate, and therefore, the number of vehicles that can be processed per hour varies between the two programs.
- c. **Tundra B0D: Do Not Process More Than One Tundra Every 2 Hours**
 - (1) In the case of the B0D, the Allowable PM Emissions Rate is 0.076 pounds per hour. As long as your dealership conducts the B0D in accordance with the **Technical Instructions**, the B0D should have PM emissions of no more than 0.047 pounds per hour, and therefore, will fall below this Allowable PM Emissions Rate.
 - (2) However, this PM emissions level of 0.047 pounds per hour assumes it will take roughly 2 hours to apply both CRCs (*i.e.*, 712AM and Noxudol 300 S) to the Tundra. If a Tundra were

processed in a shorter amount of time, then the hourly PM emissions rate could be higher.

- (3) Thus, to ensure compliance with this Allowable PM Emissions Rate, ***your dealership should not process more than one Tundra every 2 hours.***

d. **Tacoma LSC 90D: Do Not Process More Than One Tacoma Every 1 Hour**

- (1) As discussed in the Tacoma LSC 90D Dealer Information Packet, the Allowable PM Emissions Rate for the 90D process is 0.12 pounds per hour. As long as your dealership conducts the Tacoma 90D in accordance with the Technical Instructions, the 90D should have potential PM emissions of 0.068 pounds per hour, and therefore, will fall below this Allowable PM Emissions Rate.⁴
- (2) However, this potential PM emissions level of 0.068 pounds per hour assumes it will take roughly 1 hour to apply both CRCs (*i.e.*, 712AM and X128T) to the Tacoma. If a Tacoma were processed in a shorter amount of time, then the hourly PM emissions rate could be higher.
- (3) Thus, to ensure compliance with this Allowable PM Emissions Rate, ***your dealership should not process more than one Tacoma every 1 hour.***

<p>If 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) for assistance.</p>

III. AIR REGULATORY REQUIREMENTS: YOUR RECORDKEEPING OBLIGATIONS

Your dealership must maintain certain records to demonstrate that you are exempt from air permitting. **You must keep these records at your dealership for five (5) years beyond the date that you service the last Tundra under the B0D.**

The Air Recordkeeping Section contains documents that you can use to demonstrate that you are exempt from air permitting requirements because the B0D is an “insignificant activity” as defined by the Tennessee Air Pollution Control Board, in the event any questions are raised. These records include:

- 1) The Notification for Designation of the B0D as an “Insignificant Activity” as submitted to the Technical Secretary of the Tennessee Air Pollution Control Board, including all attachments; and

⁴ Since sending the Tacoma LSC 90D Dealer Information Package in 2009, TMS has adopted a more conservative approach to calculating the allowable PM emissions rate. Only the revised emission rates are presented here. Under either calculation you should be in compliance with this requirement if you process no more than one Tacoma per hour.

- 2) The Determination of Agreement regarding Designation of the B0D as an “Insignificant Activity” as received from the Technical Secretary of the Tennessee Air Pollution Control Board; and
- 3) Information Documenting the B0D’s Potential-to-Emit; and
- 4) California South Coast Air Quality Management District’s (“SCAQMD”) determination that the Vaupel HSDR 3300 Spray Guns for the B0D are equivalent to High Volume Low Pressure Application Equipment; and
- 5) B0D Equipment Manufacturer’s Specifications; and
- 6) Material Safety Data Sheets for the B0D materials (NOTE: These should also be maintained with your other MSDSs, in compliance with OSHA requirements).

You must keep the records noted above on file at your dealership for a period of five (5) years from the completion of the B0D.

(This page intentionally left blank.)

**TUNDRA CORROSION-RESISTANT COMPOUND CAMPAIGN B0D
TENNESSEE/VIRGINIA DEALER INFORMATION PACKET
(FOR TENNESSEE DEALERS SERVICING VIRGINIA-REGISTERED TUNDRAS)**

GUIDE TO FEDERAL, STATE AND LOCAL REQUIREMENTS

AIR RECORDKEEPING SECTION

IMPORTANT: Please maintain these documents in your dealership's records for a period of five (5) years after the date that you spray the last Tundra under the B0D.

Your dealership must maintain the documents and records listed below to comply with applicable record retention and availability requirements required by the Tennessee Air Pollution Control Board, in relation to a determination that the B0D is exempt from permitting requirements because it is an “insignificant activity.” You must maintain the following records for five (5) years from the completion of the B0D:

1. The Notification for Designation of the B0D as an “Insignificant Activity” as submitted to the Technical Secretary of the Tennessee Air Pollution Control Board, including all attachments. *Instructions for completing and submitting the notification are included in this Section; and*
2. The Determination of Agreement regarding Designation of the B0D as an “Insignificant Activity” as received from the Technical Secretary of the Tennessee Air Pollution Control Board; and
3. Information Documenting the B0D's Potential-to-Emit; and
4. A Brief Written Process Overview of the B0D; and
5. B0D Equipment Manufacturer's Specifications; and
6. Material Safety Data Sheets for the B0D materials. (NOTE: These should also be maintained with your other MSDSs, in compliance with OSHA requirements.); and
7. California South Coast Air Quality Management District's (“SCAQMD”) determination that the Vaupel HSDR 3300 Spray Guns for the B0D are equivalent to High Volume Low Pressure Application Equipment.

You do not need to do anything with the items above, with the exception of submitting the Notification for Designation and receiving a Determination of Agreement. You should keep these documents in your files. You may need to provide them if requested by a government agency.

(This page intentionally left blank.)

**Instructions for Submission of the Notification for Designation of the B0D as an
“Insignificant Activity”**

1. Your dealership **must not begin** the B0D until you:
 - a. Submit the attached “Notification for Designation of the B0D as an Insignificant Activity” to the Technical Secretary of the Tennessee Air Pollution Control Board (“TAPCB”); and
 - b. Receive a “Determination of Agreement” from the Technical Secretary of the TAPCB that the B0D is an insignificant activity.
2. Your dealership must submit the Notification for Designation **at least 30 days** before the estimated starting date of the B0D. **You may not start the B0D until you receive a response from the TAPCB.**

3. **Preparing the Notification For Designation**

Please go to the C.L.E.A.N Dealer website-(<http://cleandealer.com>) for electronic copies of the Notification for Designation letter and its attachments.

- a. Put the Notification for Designation on your dealership’s letterhead.
- b. Insert the proper date.
- c. Add the “Introduction, Overview and Air Emissions Calculations” document located in this **Air Recordkeeping Section** to the Notification at Attachment 1.
- d. Add the “Tundra B0D Process Overview” document located in this **Air Recordkeeping Section** to the Notification at Attachment 2.
- e. Add the B0D Material MSDSs located in this **Air Recordkeeping Section** to the Notification at Attachment 3.
- f. Add the Manufacturer’s Specifications for the Vaupel HSDR 3300 located in this **Air Recordkeeping Section** to the Notification at Attachment 4.
- g. Have the Notification of Designation signed by your dealership’s General Manager.

4. Send the Notification of Designation to:

Technical Secretary
Tennessee Air Pollution Control Board
9th Floor, L&C Annex
401 Church Street
Nashville, TN 37243

Attention: John Trimmer

5. Keep a copy of the "Notification of Designation", including all attachments, in your files.
6. Once you receive the Determination of Agreement from the Technical Secretary of the Tennessee Air Pollution Control Board that the BOD is an insignificant activity, keep a copy of this Determination in your files.

[insert dealership letterhead]

August __, 2011

Technical Secretary
Tennessee Air Pollution Control Board
9th Floor, L&C Annex
401 Church Street
Nashville, TN 37243

Attention: John Trimmer

Re: **Notification for Designation as “Insignificant Activity” Pursuant to TENN. COMP. R. & REGS. 1200-03-09.04(4)(a) for Toyota Corrosion-Resistant Compound Campaign B0D**

Dear Technical Secretary:

Toyota of Bristol submits this written notification, pursuant to TENN. COMP. R. & REGS. 1200-03-09.04(4)(a), in connection with a Toyota Corrosion-Resistant Compound Campaign B0D (“Tundra B0D”) that we would like to conduct at our dealership facility. We are seeking a determination of agreement from the Technical Secretary that the Tundra B0D – which involves a finite number of vehicles and has a theoretical “worst case” potential to emit (PTE) of less than 1 ton per year– qualifies as an “insignificant activity”. This campaign will be similar to the Tacoma Limited Service Campaign (“LSC”) that your office determined qualified as an “insignificant activity” by letter dated August 4, 2009.

This notification attaches the following supporting documents with details on the Tundra B0D:

1. Attachment 1: Toyota Campaigns to Address Frame Corrosion for Certain Vehicles Operated in Virginia and Serviced by Tennessee Toyota Dealerships - Introduction, Process Overview and Air Emissions Calculations
2. Attachment 2: Tundra B0D Process Overview.
3. Attachment 3: MSDS for two sealants to be applied to vehicle frame rails with Vaupel HSDR 3300 spray guns -- Parker 712AM and Noxudol 300 S.
4. Attachment 4: Manufacturer’s Specifications for Vaupel HSDR 3300 spray gun.

We provide a brief explanation below on the background of the Tundra B0D and the reasons that it qualifies as an insignificant activity.

I. BACKGROUND ON THE TUNDRA CORROSION-RESISTANT COMPOUND CAMPAIGN (“TUNDRA B0D”)

Toyota is now launching a Corrosion-Resistant Compound (CRC) Campaign for 2000-2003 model year (MY) Tundra vehicles registered in certain cold climate states with high road salt use. The Tundra B0D will consist of two components: (1) the next phase of Safety Recall 90M announced in November 2009 affecting the rear portion of Tundra frames in which owners of covered vehicles will

receive a CRC application to the rear portion of the frame as part of the remedy for the identified condition; and (2) a customer satisfaction program to address the potential for greater than expected levels of corrosion to the front portion of Tundra frames in these same vehicles.

Virginia, but not Tennessee, is one of the cold climate, high road salt states that will be participating in the Tundra BOD. However, Toyota of Bristol would like to participate in the Tundra BOD to accommodate our customers resident in Virginia for whom we are their nearest Toyota dealer. We are planning to begin conducting the Tundra BOD 30 days after submitting this notification.

Although the Tundra BOD is currently limited to 2000-2003 MY Tundras, additional 2004-2008 MYs are being evaluated for a possible future CRC customer satisfaction program. Consequently, Toyota has calculated the PTE figures in this letter and its attachments based on Tundra Units in Operation ("UIO") for MYs 2000-2008 to ensure that this PTE conservatively represents the maximum potential emissions for application of CRCs to all Tundras that may ultimately be covered by the current and potential future campaigns. We respectfully request that your determination that the program qualifies as an "insignificant activity" apply to both the current Tundra BOD for 2000-2003 MY Tundras as well as any future CRC campaigns covering 2004-2008 MY Tundras.

The same material that was applied to the internal frame surfaces of Tacoma trucks under the LSC will be used and applied in the same manner on the internal frame surfaces of Tundra trucks under the Tundra BOD. This CRC – "712AM"¹ -- is a paraffin wax-based material that contains 0.165 lbs. VOC/gal, but no hazardous air pollutants ("HAPs").² The Tundra's external frame surfaces will be treated using a new corrosion- resistant compound material – "Noxudol 300 S" – in lieu of the Nox-Rust X128T ("X128T") used in the LSC. Noxudol 300 S has a VOC content of 0.09 pounds per gallon (10.7 g/L), which is markedly lower than X128T's VOC content of 3.5 pounds per gallon, and likewise contains no HAPs.³

Toyota has structured the Tundra BOD in a manner that will inherently limit both actual and potential air emissions on a per-dealer basis. Toyota will supply dealers with one additional Vaupel HSDR 3300 spray gun to apply the Noxudol 300 S. Each dealer will have only one Vaupel HSDR 3300 spray gun for application of each CRC. Toyota also will supply dealers with individual vehicle "kits" that contain only the quantity of each sealant needed for one vehicle eligible for service under the Tundra BOD, as well as detailed technical instructions and regulatory compliance information.

As explained in Attachment 1, proper application of these sealants cannot be achieved with a traditional high volume, low pressure (HVLP) spray device, necessitating use of the specialized Vaupel HSDR 3300. Notably, testing and other information demonstrates the Vaupel HSDR 3300's high transfer efficiency when applying the Tundra BOD materials, and its use will ensure that emissions from the Tundra BOD remain low on a per-truck and per-dealer basis.

¹ This material used to be manufactured by Parker Industries under license from Daubert Chemical Company, Inc. under the trade name "Nox-Rust 712AM." It now is manufactured by Parker Industries independently under the trade name "712AM."

² See, Attachment 3: Parker Industries MSDS for 712AM (indicating a VOC content of 0.165 lbs/gal).

³ See, Attachment 3: Auson AB MSDS for Noxudol 300 S (indicating VOC content of 10.7 g/L which converts to 0.09 pounds per gallon).

II. THE TUNDRA B0D IS AN “INSIGNIFICANT ACTIVITY” PURSUANT TO RULE 1200-03-09.04(4)(A)

Toyota of Bristol seeks a determination of agreement from the Technical Secretary that the Tundra B0D is an “insignificant activity” (or “insignificant emissions unit”) on the grounds that its potential to emit for both VOCs and PM is less than 5 tons per year (“tpy”). We understand that Tennessee’s air regulations require permits prior to the construction (or modification) and operation of any air contaminant source, except where specifically exempted per Rule 1200-03-09.04.⁴ Rule 1200-03-09.04(4)(a) creates such an exemption for “insignificant activities” or “insignificant emissions units.”

Under this exemption, insignificant activities are defined as any activity or emissions unit that has PTE less than: (1) 5 tpy of each air contaminant and each regulated air pollutant that is not a HAP; and (2) 1,000 pounds per year of each HAP.⁵ The Tundra B0D clearly meet this definition: As explained in Attachment 1, the Tundra B0D’s PTE for all air contaminants combined is less than 1 tpy; the Tundra B0D will emit no HAPs.

III. CONCLUSION

Toyota of Bristol believes that the information presented above and attached to this letter demonstrates that the Tundra B0D satisfies the criteria for an “insignificant activity” (or “insignificant emissions unit”) under Rule 1200-03-09.04(4)(a) and is therefore exempt from Tennessee’s construction and operating air permit requirements. With this notification, we respectfully request a determination of agreement from the Technical Secretary supporting this conclusion.

As previously stated, we also request that your determination that the program qualifies as an “insignificant activity” apply not only to the current Tundra B0D covering MY 2000-2003 Tundra trucks, but also to potential CRC campaigns involving MY 2004-2008 Tundra trucks, which are currently being considered for future campaigns.

We appreciate your prompt attention to this matter. If you have any questions about Toyota of Bristol’s participation in the Tundra B0D, please do not hesitate to contact me at [phone number]. If you would like more information about the Tundra B0D generally and the information contained in Attachments 1 thru 4, you may also contact Ms. Sandra Waddell, Managing Counsel for Environmental, Health and Safety matters at Toyota, at (310) 468-4830.

Sincerely,

[Contact at Toyota of Bristol]

Attachments

⁴ TENN. COMP. R. & REGS. 1200-03-09.01(1)(a); 1200-03-09.02(2).

⁵ *Id.* 1200-03-09.04(4)(b).

(This page intentionally left blank.)

**ATTACHMENT 1: TOYOTA CAMPAIGNS TO ADDRESS FRAME CORROSION FOR CERTAIN
VEHICLES OPERATED IN VIRGINIA AND SERVICED BY TENNESSEE
TOYOTA DEALERSHIPS**

INTRODUCTION, PROCESS OVERVIEW AND AIR EMISSIONS CALCULATIONS

(This page intentionally left blank.)

ATTACHMENT 2: TUNDRA B0D PROCESS OVERVIEW

(This page intentionally left blank.)

ATTACHMENT 3: MSDSs for B0D Sealants

(This page intentionally left blank.)

ATTACHMENT 4: Manufacturer's Specifications for Vaupel HSD

(This page intentionally left blank.)

**TOYOTA CAMPAIGNS TO ADDRESS FRAME CORROSION
FOR CERTAIN VEHICLES OPERATED IN VIRGINIA AND
SERVICED BY TENNESSEE TOYOTA DEALERSHIPS**

INTRODUCTION, OVERVIEW AND AIR EMISSIONS CALCULATIONS

I. EXECUTIVE SUMMARY

Toyota has received reports indicating that the frames of certain Toyota vehicles operated in cold climate areas with high road salt use may experience greater than expected rust corrosion. This condition, when present, is distinct from the rust commonly found on metallic surfaces after some years of usage and/or outdoor exposure.

Toyota originally identified the potential for this condition to be present in certain model years of Tacoma trucks and developed a dealer-based, corrosion-resistant compound application limited service campaign to address it. This campaign – known as the “Tacoma LSC 90D” – has been offered to owners resident in 20 states and the District of Columbia, including Virginia.¹ Due to their proximity to Virginia, two Tennessee dealerships – Toyota of Bristol and Toyota of Kingsport – participated in the Tacoma LSC 90D to accommodate Toyota’s customers in Virginia for whom these were the nearest dealerships. As described in previous submissions to the Tennessee Air Pollution Control Board (APCB), the Tacoma LSC 90D entails the application by a Toyota dealer of two corrosion resistant compounds (CRCs) to the vehicle’s frame rails – one to the interior frame rail surfaces and one to the exterior frame rail surfaces – with a specialized Vaupel HSDR 3300 spray gun.

Toyota dealers have been conducting the Tacoma LSC 90D in Tennessee since August 2009, based on a formal determination from APCB that the Tacoma LSC 90D operations constitute an insignificant activity or insignificant emissions unit, as defined in Rule 1200-3-9-.04(2)(a)(3) of the Tennessee Air Pollution Control Regulations, and are thus not subject to air permitting pursuant to Rule 1200-3-9.04(4)(a). Phase I of the Tacoma LSC 90D, covering model years (MY) 2001-2004, ended in Tennessee on March 31, 2011. Phase II of the Tacoma LSC 90D, covering MY 1996-2000, is scheduled to conclude on December 31, 2011.

Toyota is now planning a second campaign to address frame corrosion for certain model years of Tundra trucks. This second campaign – which is being referred to as “Tundra B0D” – differs from Tacoma LSC 90D in that it stems, in part, from a voluntary safety recall under the auspices of the National Highway Traffic Safety Administration (NHTSA). This recall involves the rear portion of the frame on MY 2000-2003 Tundra trucks. Under B0D, Toyota dealers will apply CRCs not only to the rear cross member portion of the frame of vehicles covered by the recall, but also for a limited time to the front portion, even though not required as part of the safety recall, as an additional customer satisfaction measure. In addition, Toyota is now evaluating possible future CRC customer service campaigns relating to MY 2004-2008 Tundra trucks and other vehicle models besides Tundra.

Since launching the Tacoma LSC 90D, Toyota has been working to identify a different exterior CRC with adequate corrosion-resistant functionality, but with a lower VOC content and lower

¹

The 20 states in addition to the District of Columbia are: Connecticut; Delaware; Illinois; Indiana; Kentucky; Maryland; Maine; Massachusetts; Michigan; Minnesota; New Hampshire; New Jersey; New York; Ohio; Pennsylvania; Rhode Island; Vermont; Virginia; West Virginia; Wisconsin.

combustibility rating than the exterior CRC being used for the LSC 90D. Toyota has identified an alternative exterior CRC – with a Class IIIB combustibility rating and a much lower VOC content², but still with no hazardous air pollutants, SOx, NOx, or lead – and now plans to use that exterior CRC for Tundra B0D, along with the same interior CRC now being used for Tacoma LSC 90D. As a result of this exterior CRC substitution, the air emissions associated with the Tundra B0D will be *significantly lower* – on both a per truck and potential to emit (PTE) basis – than the Tacoma LSC 90D. Potential future CRC campaigns would use this same lower-VOC, less-combustible exterior CRC material, and would, therefore, have a low emissions profile similar to that of the Tundra B0D.

A conservative emissions calculation based on the number of vehicles that might³ be covered by Tundra B0D at Toyota of Bristol indicates a maximum, per dealer PTE of 0.04 tons of VOCs and 0.03 tons of PM. The per truck emissions also are very low: 0.11 pounds of VOCs and 0.10 pounds of PM.

Other factors will assure inherently low emissions: Toyota is instructing its dealers to conduct the Tundra B0D in the same space now being used for the Tacoma LSC 90D, which means that during the period between now and December 31, 2011 when the campaigns overlap, a dealer will not simultaneously spray a Tacoma and a Tundra vehicle. Toyota also will issue only one additional spray gun for each dealer to apply the alternative exterior CRC and will instruct its dealers to use the same spray gun being used now for the Tacoma LSC 90D to apply the interior CRC. As with the Tacoma LSC 90D, dealers will receive the CRCs for the Tundra B0D in “kits” that contain the amount of the exterior and interior CRCs needed for application to a single vehicle.

Toyota believes that the information contained in this submission provides ample basis for APCB to make a formal determination that the Tundra B0D campaign is an insignificant activity or insignificant emissions unit, as defined in Rule 1200-3-9-.04(2)(a)3 of the Tennessee Air Pollution Control Regulations, and is not subject to air permitting under Rule 1200-3-9-.04(4)(a). In addition, because any potential future Tundra CRC campaign will have emissions that are not materially different from those of the Tundra B0D campaign and will be conducted using the same type of CRC materials and spray gun, we also request that your determination that the program qualifies as an “insignificant activity” apply not only to the current Tundra B0D covering MY 2000-2003 Tundra trucks, but also to any future CRC campaigns involving MY 2004-2008 Tundra trucks.

II. DESCRIPTION OF TUNDRA B0D

Under the Tundra B0D, Toyota dealers will apply two CRCs to the frame rails – one CRC known as “712AM” to the interior and one CRC known as “Noxudol 300 S” to the exterior – using a

² The alternative exterior CRC Toyota has chosen for the Tundra B0D and future CRC campaigns is Noxudol 300 S, which has a low VOC content measured at 10.71 g/L (or 0.09 lbs/gal). The VOC content of 712AM, the same CRC used to treat interior frame surfaces for both the Tundra B0D and the Tacoma LSC 90D, has a VOC content of 19.77 g/L (or 0.165 lbs/gal). The VOC content of Noxudol 300 S and 712AM is below the exemption threshold of 20 g/L under Chapter 159, Section 3.A (3).

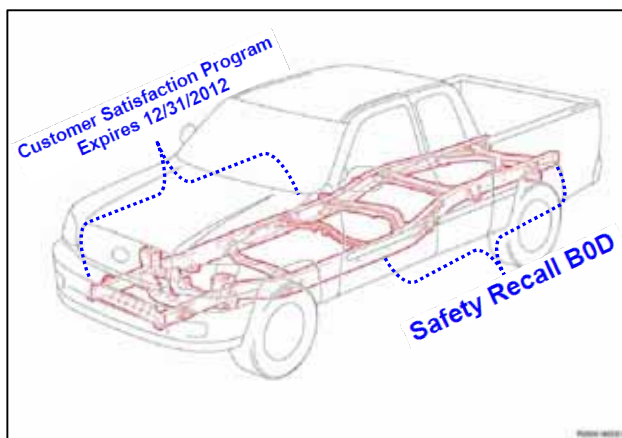
³ To ensure the PTE represents maximum potential emissions for application of CRCs to vehicles, the calculation covers not only the MY 2000-2003 Tundras now subject to B0D, but also additional MY 2004-2008 Tundras being evaluated by Toyota for a possible future CRC customer service campaign.

specialized Vaupel HSDR 3300 spray gun. A similar campaign was previously presented to APCB in July 2009 based on the use of the same Vaupel HSDR 3300 spray gun to apply the same interior CRC (*i.e.*, 712AM), but a different exterior CRC known as “X128T”. In August 2009, APCB authorized Toyota of Bristol to conduct the Tacoma LSC 90D with the 712AM and X128T CRCs by issuing formal determinations that the Tacoma LSC 90D is an insignificant activity or insignificant emissions unit not subject to air permitting.

The Tundra B0D stems, in part, from a voluntary safety recall under the auspices of the National Highway Traffic Safety Administration (NHTSA). This safety recall involves only the rear cross-member portion of the frame. As one of the measures being implemented under this recall, Toyota dealers will apply a CRC to the rear cross-member portion of the frame of vehicles covered by the safety recall. Due to the “C channel” configuration of the rear of the frame rails, no interior CRC application is required there.

For a limited time, Toyota also intends to offer owners of the MY 2000-2003 vehicles subject to the safety recall the additional customer satisfaction measure of CRC application to the front portion of the frame rails. Due to the box shape of the front of the frame rails, this measure will entail application of 712AM to the interior and Noxudol 300 S to the exterior frame rail surfaces.

Figure 1. Tundra vehicle underside frame rails subject to B0D



III. PROCESS OVERVIEW

The Tundra B0D involves an operation very similar to the Tacoma LSC 90D. For Tundra B0D, trained technicians at Toyota dealerships will apply two -corrosion-resistant compounds – one to the interior surfaces and a second to the exterior surfaces – to the vehicle’s frame rails. See the Process Overview document included in Attachment 1.

A. Materials

Toyota will provide its dealers with kits that contain the quantity of CRCs required for an individual vehicle. Dealers will use the same interior CRC as is now being used for the Tacoma

LSC 90D – 712AM – a paraffin wax-based product containing 0.165 lbs/gal (19.77 g/L) of VOC.⁴ One liter (0.264 gallons) of 712AM will be applied to the interior surfaces of each Tundra frame.

For the Tundra B0D, Toyota will replace the exterior CRC now being used for the Tacoma LSC 90D (*i.e.*, X128T), with Noxudol 300 S, a low-solvent, wax-based product with a much lower VOC content (0.09 lbs/gal or 10.71 g/L) and with no hazardous air pollutants, SOx, NOx, or lead. With its Class IIIB combustibility rating, as compared with the Class II rating of X128T, Noxudol 300 S also offers improved fire safety. Three liters (0.792 gallons) of Noxudol 300 S will be applied to the exterior surfaces of each Tundra frame.

Both of these sealant materials contain trace amounts of calcium carbonate, and Noxudol 300 S also contains trace amounts of carbon black and crystalline silica (although, as explained in the MSDSs, the carbon black and crystalline silica are bound in each sealant and will not be released as respirable particles). Neither material contains any federal Hazardous Air Pollutants (HAPs), SOx, NOx, or lead. The MSDSs for Noxudol 300 S and 712AM are provided in Attachment 2.

B. Equipment

For the Tundra B0D, Toyota will provide each dealer with one additional Vaupel HSDR 3300 spray gun to apply the Noxudol 300 S. Dealers will use the spray gun already being used for the Tacoma LSC 90D to apply the 712AM.⁵

Toyota has chosen the Vaupel HSDR 3300 because neither of the CRCs can be applied properly using a conventional high-volume, low-pressure (HVLP) spray gun. Notably, based on the spray gun's high transfer efficiency,⁶ on March 22, 2011, the California South Coast Air Quality Management District (SCAQMD) approved the Vaupel HSDR 3300 for use when applying the two CRCs. As noted in the SCAQMD approval, the transfer efficiency of the Vaupel HSDR 3300 when applying Noxudol 300 S could not be compared directly to HVLP spray guns for purposes of determining "equivalency" because "[t]he lack of sufficient accessibility to the frame rails prevents the successful use of HVLP spray technology for applying the exterior protective coating."

⁴ This material used to be manufactured by Parker Industries under license from Daubert Chemical Company, Inc. under the trade name "Nox-Rust 712AM." It now is manufactured by Parker Industries independently under the trade name "712AM."

⁵ As noted above, in the event that Toyota launches additional CRC campaigns for other vehicle models after December 31, 2011, dealers may be given the option of establishing a second service bay for spraying, and if so, receive a second set of spray guns.

⁶ The SCAQMD's review was based on transfer efficiency testing under standard SCAQMD protocols indicating that the Vaupel HSDR 3300 transfer efficiency is 69% for Noxudol 300 S. Subsequent testing, using a mock-up of a Tundra frame with the Vaupel HSDR 3300 optimized as a dealer would use it, indicates that the transfer efficiency for Noxudol 300 S *in situ* is greater than 85%. Testing could not be performed for the 712AM material due to the nature of the interior application, but a transfer efficiency can be calculated based on interior frame dimensions (minus the openings in the frame), and this calculated transfer efficiency is very high – approximately 99% for 712AM.

The Vaupel HSDR 3300's high transfer efficiency – coupled with the corrosion-resistant compounds' low VOC content and the campaigns' dealer-based implementation structures – means that the B0D will generate minimal air emissions.

C. **Waste Management**

As with the Tacoma LSC 90D, the additional Vaupel HSDR 3300 spray gun provided to apply Noxudol 300 S in the Tundra B0D will not require cleaning. Therefore, the Tundra B0D will generate minimal waste, consisting solely of cleanup supplies, such as soiled rags, and any excess materials. The B0D materials do not qualify as hazardous waste when discarded. However, because the X128T being used for the Tacoma LSC 90D may qualify as hazardous waste, and dealers will conduct the Tundra B0D in the same spray area as the LSC 90D, dealers will be advised to manage any combined B0D-LSC 90D waste as hazardous.

IV. **VEHICLE-BASED PTE CALCULATION**

As a result of the differences in vehicle configuration and the change in the exterior corrosion-resistant compound, the air emissions characteristics of the B0D will differ from those of the LSC 90D. However, the two campaigns share a key trait: an inherent emissions limit imposed by the finite number of vehicles involved.

Therefore, it is appropriate to use the same “units in operation” or “UIO” methodology to calculate the B0D's potential emissions as was employed for the LSC 90D. This UIO methodology is keyed to the maximum potential number of vehicles that Toyota of Bristol might process under the B0D. Vehicle identification numbers (VIN), combined with Tennessee Driver and Vehicle Service data, indicate – with a high degree of accuracy – that this maximum potential number is 458 vehicles⁷

The UIO methodology then involves taking this maximum number of vehicles and applying an adjustment factor of 150 percent. Doing so accords with the regulatory purpose of PTE to identify a maximum theoretical “worst case” emissions level by ensuring an even more conservative PTE calculation. This 150 percent adjustment factor increases to 687 the maximum number of vehicles that might be treated at Toyota of Bristol. This vehicle-based approach to PTE properly accounts for the limited extent of the B0D, but at the same time – due to the built-in 50 percent “cushion” and the likelihood that not all eligible vehicle owners will elect to participate – significantly overstates B0D emissions from any particular dealer.

Toyota has structured the B0D in a manner that will inherently limit both actual and potential air emissions on a per dealer basis. As noted above, each dealer will have only one Vaupel HSDR 3300 spray gun for application of each CRC. Toyota dealers also are being asked to conduct the B0D in the same service bay that is currently being used for the LSC 90D. As a result of

⁷ This UIO-based PTE includes that full range of model years – MY 2000-2008 – that might receive an application of the CRC and not just the MY 2000-2003 subject to the safety recall by Toyota. See Note 2 above.

these measures, dealers will not be able to apply CRCs to two vehicles at the same time.⁸ Moreover, as with the LSC 90D, dealers will be provided with kits that contain only the quantity of each CRC required for a single vehicle and dealers will be financially compensated for the B0D based on matching each such kit to the unique Vehicle Identification Number (VIN) assigned to each vehicle.

In the event that Toyota launches additional CRC campaigns for other vehicle models, after December 31, 2011, dealers may be given the option of establishing a second service bay for spraying, and if so receive a second set of spray guns. If a second service bay is proposed to be established, Toyota will provide you with specific PTE analysis which we expect will demonstrate that the additional spraying activity will also qualify as an insignificant activity under Tennessee air quality regulations.

Section V below reviews the per-vehicle, per-hour, per-day and yearly PTE emission calculations associated with the B0D. Based on the emission factors detailed below and using the upwards-adjusted 687 maximum potential number of vehicles that might be treated at Toyota of Bristol, the PTE emissions for the entire B0D are as follows:

- Volatile Organic Compounds – 0.04 tons; and
- Particulate Matter –0.03 tons.

The Toyota of Bristol PTE for the LSC 90D and the B0D, in the aggregate, would be:

- Volatile Organic Compounds – 1.82 tons (1.78 tons from the LSC 90D and 0.04 tons from the B0D); and
- Particulate Matter – 0.07 tons (0.04 tons from the LSC 90D and 0.03 tons from the B0D).

Notably, this combined LSC 90D and B0D emissions estimate overstates potential future emissions because the LSC 90D emission estimates presented here include the entire Tacoma UIO and do not account for vehicles that have already been treated.

⁸

To the extent that a dealer is unable to use the same service bay, *e.g.*, due to size or lift capacity limitations, a dealer may need to establish a second service bay to conduct the Tundra B0D. However, any simultaneous spraying of CRCs still would be limited in such scenario given that the dealer will have only one Vaupel HSDR 3300 spray gun for each CRC. See Note 3 *supra*.

V. VOC & PM EMISSIONS CALCULATIONS

A. VOC Emissions

1. Per Vehicle

Both Noxudol 300 S and 712AM contain VOCs that may be emitted during application and/or curing. The Noxudol 300 S material contains 0.09 pounds of VOCs per gallon, while the 712AM material contains 0.165 pounds of VOCs per gallon.

Dealers will apply a total of 1.06 gallons (4 liters) of anti-corrosion materials to each B0D vehicle – 0.792 gallons (3 liters) of Noxudol 300 S and 0.264 gallons (1 liter) of 712AM. Assuming all VOCs present in these materials are emitted during their application and/or curing, the B0D will result in VOC emissions of 0.11 pounds per vehicle (0.792 gals/Noxudol 300 S per vehicle × 0.09 lbs/VOCs per gal + 0.264 gals/712AM per vehicle × 0.165 lbs/VOCs per gal = 0.11 lbs/VOCs vehicle).

In comparison, the Tacoma LSC 90D emits 2.86 pounds of VOCs per vehicle.

2. Per Hour

It takes approximately 125.3 minutes (2.09 hours) to apply both CRCs to each Tundra vehicle. Due to having only one service bay for applying materials and one Vaupel HSDR 3300 spray gun for each material, a dealer will not be able to apply CRCs to more than one vehicle at a time. As explained above, the total quantity of CRCs applied to each vehicle will result in maximum VOC emissions of 0.11 pounds. Therefore, the maximum hourly average VOC emission rate for the B0D is 0.05 pounds per hour (0.11 lbs/vehicle ÷ 2.09 hrs/vehicle = 0.05 lbs/hr).

For the Tacoma LSC 90D, maximum hourly VOC emissions are 2.93 pounds per hour (based on a 58.5-minute application time and emission of 2.86 pounds of VOC per vehicle). Given that only one service bay will be used for both the LSC 90D and the B0D, the LSC 90D emissions (2.93 lbs/hour) will represent the maximum hourly VOC emissions for the period from the present through the end of the LSC 90D on December 31, 2011.

3. Per Day

Based on (i) the time necessary to apply the CRCs to one vehicle (i.e., approximately 125.3 minutes), (ii) the fact that each dealership generally operates for no more than 12 hours/day, and (iii) other inherent B0D limitations (e.g., the additional time it takes to clean each vehicle using mechanical techniques prior to applying the CRCs and the fact that each dealership will have only one set of spray guns), a dealership will only be able to process a maximum of 5 Tundra vehicles per day. This maximum processing rate would yield no more than 0.55 pounds of VOC emissions per day (5 vehicles/day × 0.11 lbs/vehicle = 0.55 lbs/day).

Underscoring the efforts of Toyota to identify a lower VOC exterior CRC, the similar calculation for the LSC 90D indicates notably higher maximum daily VOC emissions of

34.3 pounds per day (based on a maximum of 12 trucks per day and 2.86 pounds/vehicle).

4. **PTE**

Based on VOC emissions of 0.11 pounds per vehicle, the Toyota of Bristol UIO-based PTE for B0D, assuming 687 vehicles (with the 150 percent adjustment factor), is 0.04 tons ($0.11 \text{ lbs/vehicle} \times 687 \text{ vehicles} \div 2,000 \text{ lbs/ton} = 0.04 \text{ tons}$).

The Toyota of Bristol UIO-based PTE for the Tacoma LSC 90D is 1.78 tons of VOCs. Thus, the aggregate Toyota of Bristol VOC PTE for the LSC 90D and B0D is 1.82 tons ($1.74 \text{ tons} + 0.04 \text{ tons} = 1.82 \text{ tons}$), but if adjusted to reflect only those Tacoma vehicles that have not yet been serviced under the LSC 90D (899 vehicles, with the 150 percent adjustment factor), the aggregate remaining VOC PTE for Tacoma and Tundra would be 1.32 tons.

B. **PM Emissions**

PM emissions from 712AM will be minimal due to the inherently high transfer efficiency (*i.e.*, low overspray) when spraying the interior surfaces of the Tundra frame. A calculation of transfer efficiency based on the frame dimensions and limited frame openings indicates a transfer efficiency of slightly higher than 99% when applying 712AM material to the interior frame surfaces. PM emissions, therefore, will result primarily from the exterior material, Noxudol 300 S. Testing demonstrates that the Vaupel HSDR 3300 spray gun has a transfer efficiency of at least 85% when applying Noxudol 300 S to the external frame surfaces.

1. **Per Vehicle**

Dealers will apply 0.792 gallons (3 liters) of Noxudol 300 S and 0.264 gallons (1 liter) of 712AM to each Tundra vehicle. If it is assumed that 100% of any solids that are not transferred onto a vehicle are emitted as PM, the application of Noxudol 300 S would result in emissions of 0.94 pounds of PM per vehicle ($0.792 \text{ gals/vehicle} \times 7.97 \text{ lbs/gal} \times 98.9\% \text{ solids by weight} \times (100\% - 85\% \text{ transfer efficiency}) = 0.94 \text{ lbs/vehicle}$) and the application of 712AM would result in emissions of 0.01 pounds of PM per vehicle ($0.264 \text{ gals/vehicle} \times 7.885 \text{ lbs/gallon} \times 97.9\% \text{ solids by weight} \times (100\% - 99\% \text{ transfer efficiency}) = 0.02 \text{ lbs/vehicle}$). Therefore, assuming 100% emission of solids as PM, total PM emissions from the B0D would be 0.96 pounds per vehicle.

However, after analyzing the results of tests performed by Concurrent Technologies Corporation to evaluate application of Noxudol 300 S to the Tundra frame, Environ Corporation has concluded that at least 90% of any PM emitted from application of Noxudol 300 S will fall out of the air before reaching the ambient outdoor air, thus reducing the B0D's emissions from application of the exterior CRC by at least 90%. Applying this 90% fallout factor to the exterior CRC emissions, and conservatively assuming a 75% fallout factor for the interior CRC emissions, total PM emissions from the B0D are expected to be at most 0.1 pounds per vehicle ($0.94 \times 10\% + 0.02 \times 25\% = 0.10 \text{ lbs/vehicle}$).

In comparison, the LSC 90D emits 0.07 pounds of PM per vehicle (using a 75% fallout factor).⁹

2. Per Hour

As explained above, the application of the CRCs to one Tundra takes approximately 125.3 minutes (2.09 hours) and the single set of spray guns will limit each dealership to spraying only one Tundra vehicle at a time. Therefore, the maximum hourly average PM emissions rate for the B0D is 0.05 pounds per hour ($0.10 \text{ lbs/vehicle} \div 2.09 \text{ hrs/vehicle} = 0.05 \text{ lbs/hr}$).¹⁰

For the LSC 90D, maximum hourly PM emissions are 0.07 pounds per hour (based on a 58.5-minute application time and emission of 0.07 pounds of PM emitted per vehicle). Due to only one service bay being used for both the LSC 90D and the B0D, the LSC 90D emissions (0.07 lbs/hour) represent the maximum hourly PM emissions for the period from the present through the end of the LSC 90D on December 31, 2011.

3. Per Day

As explained above, a dealership participating in the B0D will process no more than 5 vehicles per day. Processing 5 vehicles per day will result in the emission of up to 0.50 pounds of PM per day ($5 \text{ vehicles/day} \times 0.10 \text{ lbs/vehicle} = 0.5 \text{ lbs/day}$).

The similar calculation for the LSC 90D yields maximum daily PM emissions of 0.8 pounds per day (based on a maximum of 12 trucks per day and 0.07 pounds/vehicle).

4. PTE

Based on PM emissions of 0.10 pounds per vehicle, the Toyota of Bristol UIO-based PTE for B0D, assuming 687 vehicles (with the 150 percent adjustment factor), is 0.03 tons ($0.10 \text{ lbs/vehicle} \times 687 \text{ vehicles} \div 2,000 \text{ lbs/ton} = 0.03 \text{ tons}$).

Using the same methodology, the PTE for the LSC 90D emissions was calculated to be 0.04 tons. Thus, the aggregate PM PTE for the LSC 90D and B0D would be 0.07 tons ($0.04 \text{ tons} + 0.03 \text{ tons} = 0.07 \text{ tons}$). If this amount is adjusted to reflect only those Tacoma vehicles that have not yet been serviced under the LSC 90D (899 vehicles, with the 150 percent adjustment factor), the aggregate remaining PM PTE for LSC 90D and B0D would be 0.06 tons.

⁹ No study was conducted to verify the fallout factor for application of X128 to the Tacoma frames, and therefore, Toyota's consultant, Environ Corporation, determined that it would use a 75% fallout factor as a conservative measure.

¹⁰ This value represents the average hourly emission rate of PM while applying both CRCs over the entire time required to treat a single Tundra vehicle. Higher instantaneous emissions could occur during application of Noxudol 300 S (approximately 0.055 lbs/hour at a 90% fallout rate).

Summary of LSC 90D and B0D Emissions

	Tacoma LSC 90D	Tundra B0D	Aggregate
VOC			
Per Vehicle (lbs)	2.86	0.11	n/a
Per Hour (lbs/hr)	2.93	0.05	n/a
Per Day (lbs/day)	34.3	0.55	n/a
PTE (tons)	1.78	0.04	1.82
PM			
Per Vehicle (lbs)	0.07	0.10	n/a
Per Hour (lbs/hr)	0.07	0.05	n/a
Per Day (lbs/day)	0.8	0.5	n/a
PTE (tons)	0.04	0.03	0.07

VI. CONCLUSION

At this time, Toyota of Bristol seeks a formal determination of agreement from the APCB that the Tundra B0D campaign is an insignificant activity or insignificant emissions unit, as defined in Rule 1200-3-9-.04(2)(a)3 of the Tennessee Air Pollution Control Regulations, and is not subject to air permitting under Rule 1200-3-9-.04(4)(a). While the Tundra B0D campaign is currently planned for Tundra MY 2000-2003, Toyota is evaluating MY 2004-2008 for a potential customer service program and, accordingly, has included the full range of Tundra model years in its PTE calculations. Any such future Tundra campaign would use the same Vaupel HSDR 3300 spray gun and the same CRC materials, and would have the same low VOC and PM emissions and low combustibility ratings. We therefore respectfully request that your determination that the program qualifies as an "insignificant activity" apply not only to the current Tundra B0D covering MY 2000-2003 Tundra trucks, but also to potential CRC campaigns involving MY 2004-2008 Tundra trucks, which are currently being considered for future campaigns.

TUNDRA B0D PROCESS OVERVIEW

The Tundra Corrosion-Resistant Compound Campaign B0D (B0D) comprises two processes:

- 1) **Safety Recall B0D Application Area**, which entails application of Noxudol 300 S to the external surfaces of the rear portion of the Tundra frame. This procedure is available to customers without a time limit.
- 2) **Customer Satisfaction Program Application Area**, which entails application of Noxudol 300 S to the external surface, and application of 712AM to the internal surface, of the front portion of the frame. This procedure is available until 12/31/2012.

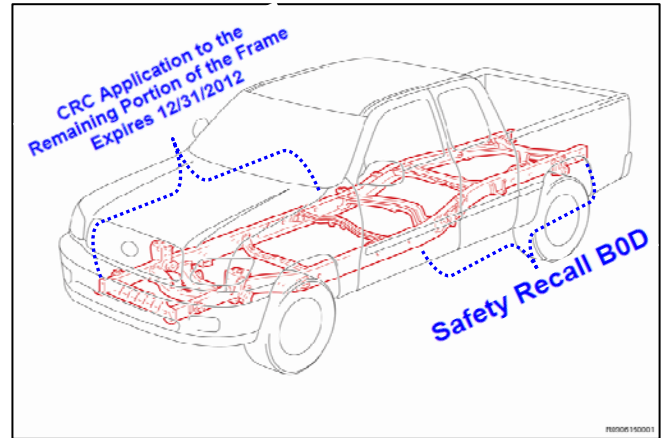
All Tundra B0D activities will occur indoors at existing dealership service areas that comply with fire, zoning and building codes. The B0D will consist of the three primary steps discussed below.

Step 1: Initial Work Area Setup. Locate dedicated work area in dealership's service area that has a vehicle lift, is well ventilated, is away from other vehicles, and can be sectioned off with temporary partitions. No physical alteration of the workspace or installation of new equipment is required for the B0D. You should use the work area already used for the Tacoma LSC 90D if it is large enough to accommodate the Tundra.

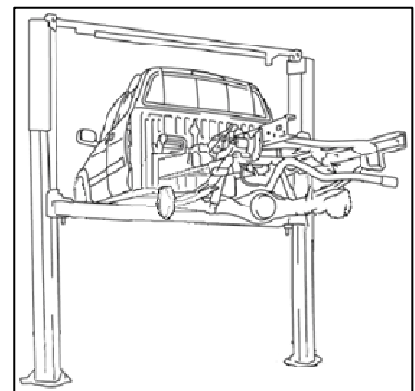
Step 2: Vehicle Preparation. Dealers will employ the following procedures to prepare their service areas and vehicles for spraying.

- Remove truck bed assembly.
- Clean frame, if necessary. It may be necessary to clean the frame, 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 (e.g., tires and wheels, spare tire, engine under cover).
- 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, wire brush, and/or compressed air.
- Mask parts. Mask areas not to be sprayed (e.g., drive shaft, brake/hub assemblies, exhaust).

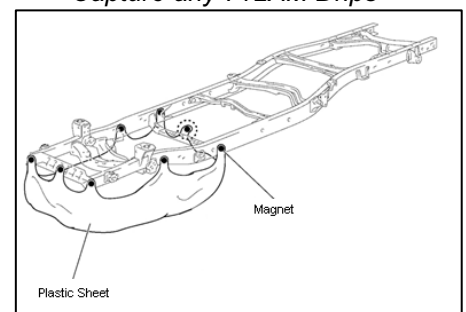
Tundra Frame Diagram Identifying B0D Components



Tundra on Lift with Bed Removed



Attachment of Plastic Sheet to Capture any 712AM Drips

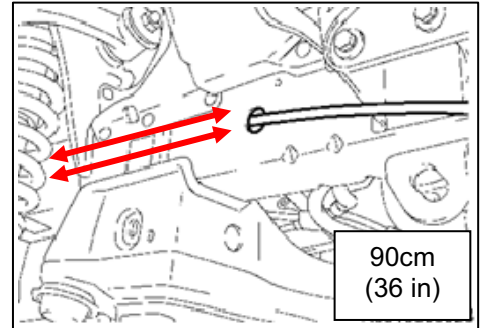


- Attach Plastic Sheet: To capture any 712AM that may drip through small holes in the frame, use magnets to suspend a plastic sheet underneath the front portion of the frame.

Step 3: Material Application. Dealers will apply the B0D Corrosion-Resistant Compounds as follows:

- Apply 712AM. Set up Vaupel spray gun and insert 8mm spray nozzle a specified distance into selected holes in the frame. Press spray gun trigger and pull out nozzle at fixed speed while spraying interior surface of frame with one liter of 712AM. When finished, insert rubber plugs and foam blocks to keep 712AM in the frame.

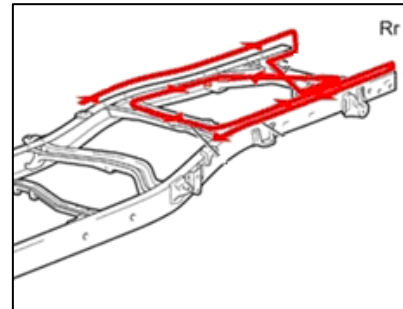
360° Spray Wand Inserted into Frame



- Remove plastic sheet suspended from frame.
- Lower lift. Lower the lift until the top of the rear portion of the frame is approximately 4'6" above the floor.

Top Surface of Rear Frame Portion
Where Noxudol 300 S is Applied

- Apply Noxudol 300 S to top external surface of rear portion of frame. Set up Vaupel spray gun and locate unidirectional handheld spray nozzle 4-8 inches from frame surface. Press spray gun trigger and spray Noxudol 300 S on the top of rear portion of the frame by moving spray nozzle at fixed speed across frame surface.

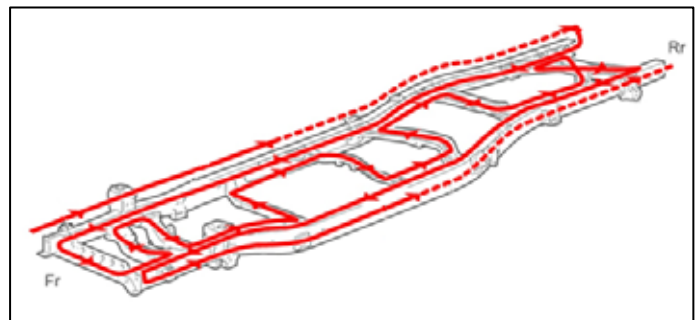


- Reattach truck bed assembly.

- Raise truck on lift.

- Apply Noxudol 300 S to frame bottom and side external surfaces. From the same working distance, press spray gun trigger and apply remaining Noxudol 300 to bottom and side external surfaces of entire frame at fixed speed. Refill spray gun with Noxudol 300 as needed until all three (3) liters of material are used.

Side and Bottom Surfaces of Frame
where Noxudol 300 S is Applied



- Final steps. Reinstall components of vehicle; remove all masking; remove truck from lift; and spray Noxudol 300 S on areas of frame previously covered by lift arms. Allow 712AM and Noxudol 300 S to cure overnight before returning vehicle to customer. Comply with any recordkeeping and material handling requirements.

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

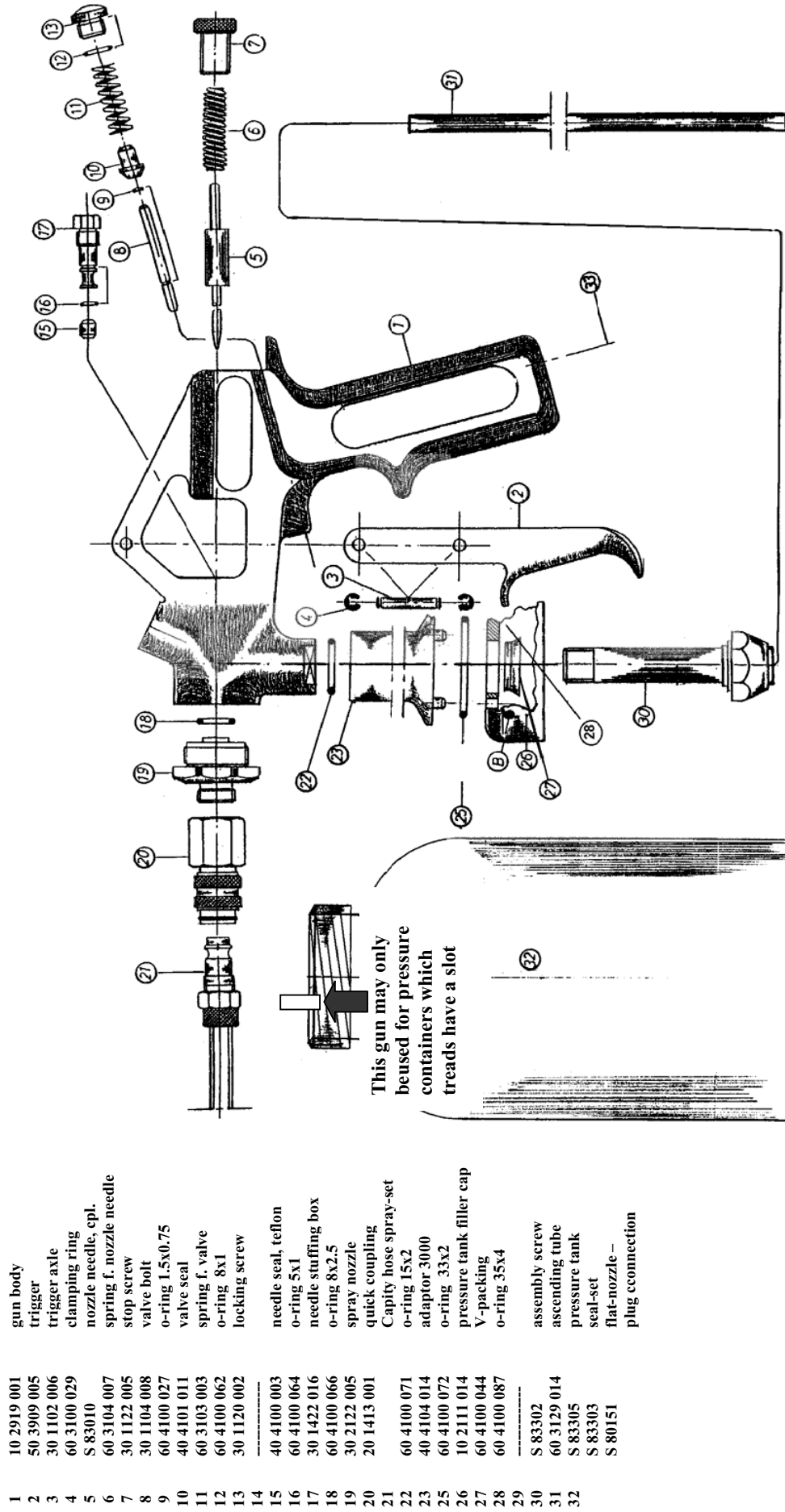
- Valve bolt (8) is stuck or does not close:
Put oil on the valve bolt or into the air intake port of the gun. Depress the trigger (2) several times.
- Gun does not spray properly:
Spray nozzle (19), ascending tube (31), cavity spray tube round spray or angle nozzle or gun (1) partly clogged.
Remove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

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:
Date of Preparation: November 14, 2007

Revised: March 17, 2011
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, CO₂, 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.



MATERIAL SAFETY DATA SHEET

Noxudol 300 S

Last Updated April 18, 2011

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
Verkstadsgratan 3
S-434 42 Kungsbacka
Sweden
www.auson.se

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

PHONE: +46 300-562000
FAX: +46 300-562001

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

<u>Chemical Name</u>	<u>Amount % by Wt.</u>	<u>CAS Number</u>	<u>OSHA PEL (ppm)</u>	<u>ACGIH STEL (ppm)</u>
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/(%SiO ₂ +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):

MINIMUM 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



MATERIAL SAFETY DATA SHEET

Noxudol 300 S

Last Updated April 18, 2011

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.

64741-88-4

CHEMICAL NAME

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



MATERIAL SAFETY DATA SHEET

Noxudol 300 S

Last Updated April 18, 2011

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	

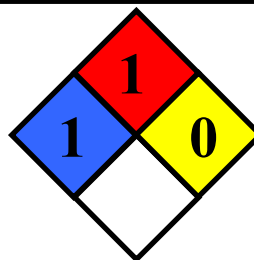


MATERIAL SAFETY DATA SHEET

Noxudol 300 S

Last Updated April 18, 2011

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)

Part Number: --

Approved By: Soken Trade Corporation

Approval Date: April 18, 2011

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

(This page intentionally left blank.)



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

March 22, 2011

Mr. Daniel E. Monette
National Manager
Environmental, Health and Safety
Toyota Motor Sales, U.S.A., Inc.
19001 South Western Avenue
Torrance, CA 90501

Dear Mr. Monette:

Subject: Rule 1151 Transfer Efficiency Approval of the Vaupel HSDR 3300 Spray Gun

Reference is made to your application number 518629 which you submitted to request that the Vaupel HSDR 3300 spray gun be considered equivalent to high-volume, low-pressure (HVLV) spray equipment under Rule 1151(d)(7)A(iii) for the application of internal (Parker 712 AM) and external (Auson AB Noxudol 300S) protective coatings on the frame rails of Toyota Tacoma trucks (model years 1995 through 2004) and Toyota Tundra trucks (model years 2000 through 2006). In support of your request, you submitted the following information.

1. A report entitled, "Supplemental Spray Equipment Transfer Efficiency Test of the Vaupel HSDR 3000 using Noxudol 300" dated January 19, 2011
2. MSDS for the Parker 712 AM and Auson AB Noxudol 300 S coatings
3. Photographs of spray patterns for typical HVLV spray guns and the Vaupel HSDR 3300 spray gun
4. Photographs of the Tundra undercarriage showing the frame rails
5. Drawings of the Tacoma and Tundra frames
6. An e-mail dated February 3, 2011 containing supplemental information

The results of the transfer efficiency testing performed on December 28, 2010 indicate that the Vaupel HSDR 3300 spray gun is capable of achieving a transfer efficiency of 69.04% when applying the Auson AB Noxudol 300 S exterior protective coating. Toyota Motor Sales did not submit transfer efficiency test results for an HVLV spray gun applying the Auson AB Noxudol 300 S exterior protective coating for comparison purposes since HVLV spray technology is not capable of reaching all of the exterior surfaces of the frame rails due to the configuration of the frame rails and other vehicle parts that are in close proximity to the frame rails. The lack of sufficient accessibility to the frame rails prevents the successful use of HVLV spray technology for applying the exterior protective coating.

While actual transfer efficiency testing was not conducted to simulate the proposed application of the Parker 712 AM interior protective coating, Toyota Motor Sales did submit information on February 26, 2009 and January 21, 2011 regarding the configuration of the frame rails and the viscosity of the coating. Both the interior configuration of the frame rails and the high viscosity of the Parker 712 AM coating make the use of HVLP spray equipment infeasible. A review of the design of the tubular frame rails of the Tacoma and Tundra trucks indicates that the transfer efficiency for coating the interior of the frame rails should approach 99%.

Based on the transfer efficiency test data for the Auson AB Noxudol 300 S exterior protective coating, an evaluation of the configuration of the Tacoma and Tundra frame rails, the tubular configuration of portions of the Tacoma and Tundra frame rails, the calculated transfer efficiency for coating the interior of the tubular frame rails, and the viscosity of the Parker 712 AM interior coating, the Vaupel HSDR 3300 spray gun is approved for limited operations subject to Rule 1151, Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations, under Rule 1151(d)(7)(A)(iii) provided the following conditions are met.

1. The Vaupel HSDR 3300 spray gun shall only be used to apply Auson AB Noxudol 300S and Parker 712AM corrosion preventive coatings to the frame rails of Toyota Tacoma trucks model years 1995-2004 and Tundra trucks model years 2000-2006 at the Toyota Motor Sales, U.S.A., Inc. facility located at 2015 W. 190th Street, Torrance, CA 90501 and identified by District facility ID 80904.
2. This approval is only valid if the air pressure supplied to the Vaupel HSDR 3300 spray gun is equal to or less than 52 psig when applying the Auson AB Noxudol 300 S coating and equal to or less than 75 psig when applying the Parker 712 AM coating.
3. This approval is only valid if during actual operation the Vaupel HSDR spray gun is equipped with a 160 psig (full scale) mechanical pressure gauge with markings every 2 psig and the pressure gauge is operating properly.
4. The Vaupel HSDR 3300 spray gun shall be equipped with a Vaupel Cavity Spray Tube 3900/3901-WH spray wand when applying the corrosion preventive coatings. The Auson AB Noxudol 300 S protective coating shall only be applied to the exterior of the frame rails. The Parker 712 AM protective coating shall only be applied to the interior of the frame rails. During operation, the maximum distance of the spray wand tip to the substrate to be coated shall not exceed 8 inches.
5. Pursuant to District Rule 219, unless a permit to construct and operate is obtained from the District for the Vaupel HSDR 3300 spray gun, the maximum quantity of coatings and associated VOC containing solvents (including clean-up) used in the Vaupel HSDR 3300 spray gun shall not exceed 1 gallon per day or 22 gallons per calendar month. Toyota Motor Sales shall maintain records of

the coating usage. The last two years of records shall be retained at the facility and be made available to District representatives upon request.

6. This approval is only valid for the Vaupel HSDR 3300 spray gun model tested. Any modification of the spray gun or pressure gauge design shall invalidate this approval unless the modification is approved by the South Coast Air Quality Management District.

If you have any questions regarding this approval, please call Emmanuel Quizon, AQ Engineer, at (909) 396-2523 or send him an e-mail at equizon@aqmd.gov.

Sincerely,



Fred Lettice
Senior Manager
Coating, Printing, Plating, Military
& Entertainment Operations

FEL:EVQ

(This page intentionally left blank.)

**TUNDRA CORROSION-RESISTANT COMPOUND CAMPAIGN B0D
TENNESSEE/VIRGINIA DEALER INFORMATION PACKET
FOR TENNESSEE DEALERS SERVICING VIRGINIA-REGISTERED TUNDRAS**

FEDERAL, STATE AND LOCAL REQUIREMENTS GUIDE

FIRE, BUILDING AND ZONING CODES SECTION

Please review the entire Information Packet – including this Fire, Building and Zoning Codes Section – with your Service and Parts staff.

In addition to the requirements identified in other Sections, your dealership must comply with any applicable state and local fire, building and zoning code requirements. This Section discusses how to comply with these requirements.

WHERE WILL YOU CONDUCT THE B0D?

Same Space As Tacoma LSC 90D: If you will conduct the Tundra B0D in the same space now being used for the Tacoma LSC 90D, then you should be able to rely on the approval already received for the LSC 90D from your local fire code enforcement official. **Before beginning the Tundra B0D**, you will need simply to notify your local fire code enforcement official, in writing, of your intention to use this same space to spray lower combustibility CRCs on Tundras, and then, you may proceed without any additional approval (unless this official contacts you and requests that you not proceed). You will find a model letter and attachments for providing this notification later in this Section.

Different Space From Tacoma LSC 90D: If you intend to conduct the B0D in a space different from the one now being used for the Tacoma LSC 90D, then you will need a new approval from your local fire code enforcement official. Please discontinue reading this Section and call the C.L.E.A.N. Dealer EH&S Hotline at 877-572-4347 to discuss your situation and also consult the Site Selection Section of this Dealer Package.

BEFORE you begin applying B0D materials, you must do BOTH of the following:

1. **Notify the appropriate fire code enforcement official, in writing, of your intent to conduct the Tundra B0D in the same space now being used for the Tacoma LSC 90D**

In Appendix A you will find a model letter and attachments that you can use to notify your fire code enforcement official. You will need to add some descriptive information confirming that the space where you will conduct the Tundra B0D is the same now being used for Tacoma LSC 90D.

These materials include a Determination of Compliance with the applicable fire codes prepared by Commercial Construction Consulting, Inc. ("C3") for TMS. To identify your appropriate fire code enforcement official see Table 1 of this Section (starting at page 83).

IMPORTANT – PLEASE READ

Important: The Tundra B0D is designed to comply with state and local fire codes and with your previous approval to conduct the Tacoma LSC 90D. Therefore, you should be able to notify your fire code enforcement official about B0D and then proceed with the Campaign. It is possible, however, that your fire code enforcement official may request that you not proceed with the Tundra B0D until the official can review your situation. If this occurs, please work with your official and do not proceed with B0D until you have received his approval to do so. **If you face this situation and have questions or need assistance, go to the C.L.E.A.N. Dealer website (<http://cleandealer.com>) or call the EH&S Hotline (877-572-4347) prior to conducting the B0D.**

2. **Confirm that you can conduct the B0D in compliance with applicable fire code, building, and zoning requirements.**

Locate your city/town/county on Table 1 (starting at page 83) to see whether it has any additional building, zoning, or other requirements applicable to the B0D and contact your local officials as indicated.

(Go to next page for summary of applicable State requirements.)

I. SUMMARY OF APPLICABLE STATE REQUIREMENTS

A. Fire Code⁵

1. The B0D does not require a state fire permit under the Tennessee State Fire Code (Fire Code) and Appendix A contains a Determination of Compliance that the B0D complies with the Fire Code (and locally adopted fire codes, as appropriate) so long as you conduct the B0D in the same location where you are conducting the Tacoma LSC 90D and you continue to follow the procedures outlined in this Fire, Building & Zoning Code Section and the Site Selection Section of the Dealer Packet. The Fire Code does require you to inform the appropriate fire code enforcement official before commencing B0D operations at your dealership. See Table 1 (starting at pg. 83) for your dealership's requirements and appropriate fire code enforcement official.

Regulatory Note: Your dealership is assumed to comply already with existing fire code requirements (e.g., sprinkler systems, ventilation, etc.) applicable to your dealership.

IMPORTANT! – FIRE CODE INFORMATION

You must continue to comply with items 2 and 3 below, and any additional requirements contained in Table 1 (starting at p. 83) or placed on your dealership as part of the approvals received for the Tacoma LSC 90D as part of your implementation of the B0D. **If you cannot meet all the requirements identified in items 2 or 3, please go to the C.L.E.A.N. Dealer website (<http://cleandealer.com>) or call the EH&S Hotline (877-572-4347) for additional assistance.**

2. You should be able to conduct the B0D consistent with state and local fire codes so long as you conduct the B0D in the same location as the LSC 90D and continue to satisfy all of the following requirements:
 - a. Adequate ventilation in the area where the B0D will be conducted; **and**
 - b. No open flames or spark-producing equipment within 20 ft of the B0D operations; **and**
 - c. No drying, curing, or fusion apparatus within 20 ft of the B0D operations; **and**
 - d. No solvents used for cleaning procedures with a flash point below 100°F. (Note: the B0D will not require any cleaning procedures that require solvents with flash point(s) below 100°F.); **and**
 - e. That the materials applied to the truck bed include only Class IIIB liquids and not include any organic peroxide catalyst⁶ (Note: Each of

⁵ Tennessee adopts the International Fire Code (IFC) 2006 ed. as the minimum statewide fire code standard. Pursuant to authority provided to it under state law, your jurisdiction has adopted the National Fire Protection Association's National Fire Codes, which has specific provisions in NFPA 33, the Standard for Spray Application Using Flammable or Combustible Materials, governing spraying operations like the B0D.

⁶ Among other requirements, in order to conduct the B0D consistent with the NFPA 33, the materials sprayed must meet at least one (1) of the following criteria: (1) Be no more hazardous than UL Class 30-40, when tested in accordance

the B0D's Corrosion-Resistant Compounds that you are being provided – interior and exterior - satisfies this requirement); **and**

- f. Fire extinguishers be provided in the vicinity⁷ of the B0D operation (*Note: fire extinguishers must be rated “B”, “AB”, or “ABC”*).

Note: Consistent with the **Technical Instructions**, the floor space of the area where the B0D will be conducted should be covered by an approved, noncombustible, nonsparking, fire retardant material.

Technical Note: If you have a question about whether your plans for conducting the B0D will satisfy any of these requirements, please go to the C.L.E.A.N. Dealer website (<http://cleandealer.com>) or call the EH&S Hotline (877-572-4347).

3. Both B0D materials are considered Class IIIB combustible liquids and the amount of materials that you will use during the B0D should not trigger any new combustible liquid storage requirements for your dealership. However, as a best management practice, please store consistently with the guidelines below:
- a. **DO NOT store more than 25 gallons of the B0D materials and any other regulated flammable or combustible materials in any one fire area;** otherwise you may be subject to additional requirements; or
 - b. **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.
 - (1) A single fire cabinet may hold up to 120 gallons.
 - (2) Your dealership may only have up to three fire cabinets in each fire area, each of which may hold up to 120 gallons. If you store at these levels (3 x 120 gals = 360 gals) you should confirm with your appropriate fire code enforcement official that such storage at these level does not require an operational permit in your locality.

(Go to Next Page for Building Code Discussion)

with UL 340, Test for Comparative Flammability of Liquids; (2) Not contain any solvent or component that has a flash point below 37.8°C (100°F); or (3) Consist only of Class IIIB liquids and not include any organic peroxide catalyst. The B0D was designed to only use Class IIIB liquids without organic peroxide catalysts.

⁷ See the Site Selection Section in this Dealer Information Packet for specific distancing requirements for fire extinguishers in the vicinity of the spraying area.

B. Building Code⁸

1. **The BOD should not require a building permit under the Tennessee Building Code** because adding the BOD would not “construct, enlarge, alter, repair, move, demolish, or change the occupancy of [your] building,” nor does it “erect, install, enlarge, alter, repair, remove, convert or replace any electrical, gas, mechanical or plumbing system.” (**NOTE:** Local codes **might** impose building permit requirements, as noted in the Table starting on page 83.⁹

Regulatory Note: *It is assumed that your dealership:*

(i) complies already with building code requirements (for example, it is assumed that your dealership has a valid certificate of occupancy, meets the requirements for fire protection specified for repair garages and meets the mechanical ventilation requirements specified for repair garages); and

(ii) does not require any building, electrical, gas, plumbing or mechanical system modifications for the BOD.

If these assumptions do not apply, please go to the C.L.E.A.N. Dealer website (<http://cleandealer.com>) or call the EH&S Hotline (877-572-4347)

II. SUMMARY OF APPLICABLE LOCAL REQUIREMENTS

Table 1 below identifies the local requirements applicable to the BOD (if any). It is organized by the city/local jurisdiction where your dealership is located. **IF THE LOCALITY WHERE YOU PLAN TO CONDUCT THE BOD IS NOT LISTED IN TABLE 1 (STARTING AT PAGE 83), PLEASE GO TO THE C.L.E.A.N. DEALER WEBSITE ([HTTP://CLEANDEALER.COM](http://CLEANDEALER.COM)) OR CALL THE EH&S HOTLINE (877-572-4347).** The sections below briefly review these requirements.

Regulatory Note – Regarding Conditional Use Permits: If your dealership operates pursuant to a conditional use permit, special exception, or other special use permit, you must determine whether that permit prohibits the BOD process or considers it a “change in use” because, if so, then you may need a permit amendment. If you have any questions about zoning requirements, please go to the C.L.E.A.N. Dealer website (<http://cleandealer.com>) or call the EH&S Hotline (877-572-4347).

⁸ Tennessee has adopted, in part, the International Building Code (2006).

⁹ In particular, the application of the CRCs materials being used for the BOD should not trigger any requirements for changes or modifications to the electrical wiring. These liquids are not flammable and are not expected to create a flammable vapor area, and any overspray will be controlled with temporary partitions.

Regulatory Note – Other Generally Applicable Local Laws and Regulations: This Guide does not address other local laws and regulations that may apply generally to your dealership's operations. Such laws and regulations may impose, among other requirements, general housekeeping and/or performance standards that require you to safeguard against improper release of materials that may pose health or environmental risks and to clean up (and report to appropriate authorities) any such improper release.

Unless noted in Table 1, your dealership is likely not subject to additional requirements under local zoning and building codes as a result of the BOD. However, should the need arise to discuss the BOD with your local authorities (in addition to the appropriate fire code enforcement official), the information assembled in Appendix A can be used for that purpose as well.

Table 1: Code Summary for Tennessee Locations

Location Tennessee	Local Fire Code Official & Fire Code Type	Other Potentially Relevant Local Requirements
Bristol	<p>Bob Barnes Fire Chief Bristol Tennessee Fire Department 211 Bluff City Highway Bristol, Tennessee 37620 Phone: 423-989-5701 Fax: 423-989-5706</p> <p>IFC/NFPA Jurisdiction - Materials to contact local fire official are found in Appendix A.</p>	<p>You should verify that the BOD will not constitute a change in use or impermissible use under your dealership's zoning permit or other land use approvals, if applicable.</p> <p>Contact</p> <p>Shari Brown, AICP Community Development Director 104 8th Street Bristol, TN 37601 423-764-0343</p>
Kingsport	<p>Robert Sluss Fire Marshal Kingsport Fire Department 130 Island St. Kingsport, TN 37660 423-229-9440</p> <p>Dee Morgan Building Department The City of Kingsport 225 West Center Street Kingsport, TN 37660 423-229-9393</p> <p>IFC Jurisdiction - Materials to contact local fire official are found in Appendix A.</p> <p>Materials must be sent to both the Fire Marshal's Office and the Building Department.</p>	<p>You should verify that the BOD will not constitute a change in use or impermissible use under your dealership's zoning permit or other land use approvals, if applicable.</p> <p>Contact</p> <p>Alan Webb Planning Manager 201 W Market St Kingsport, TN 37660 423-229-9485</p>

(This page intentionally left blank)

APPENDIX A

Materials to Demonstrate Compliance with the International Fire Code/NFPA 33

Compliance Information

&

Materials to submit to the Appropriate Fire Code Enforcement Official

- **Model Letter**
- **B0D Operation Description**
- **C3 Determination of B0D Compliance with the IFC/NFPA 33**
- **Dealer Information Sheet**

(Electronic copies or available on the C.L.E.A.N. Dealer website - <http://cleandealer.com>)

(This page intentionally left blank.)

Appendix A1: International Fire Code/NFPA 33 Jurisdiction- Summary of Fire Code Requirements

Your local jurisdiction is subject to the 2006 edition of the International Fire Code (IFC) and 2003 edition of NFPA 33, Standard for Spray Application Using Flammable or Combustible Materials.

- **Before you begin conducting the B0D, you will need to provide your local fire code enforcement official with information about the B0D and your intent to conduct the B0D in the same space where you are/were conducting the Tacoma LSC 90D.** Under applicable codes, the appropriate fire code enforcement official has the authority to require plans and specifications to ensure compliance with applicable codes and standards, and may require an operating permit for B0D spraying operations.
- **To assist you with contacting your appropriate fire code enforcement official, Appendix A2 contains** (1) a model letter, (2) a Determination of Compliance and B0D Process Description (and MSDSs) from Commercial Construction Consulting Inc. ("C3"), a professional consulting firm retained by Toyota to assess the B0D's compliance with the IFC/NFPA 33, (3) a background information sheet that you must complete that will provide your appropriate fire code enforcement official with relevant dealer-specific information about where the B0D operation will take place. *(Note: Electronic copies of these materials can be found on the C.L.E.A.N. Dealer website - <http://cleandealer.com>).*
- **You should do the following:**
 - Address the model letter to the appropriate fire code enforcement official and put it on your dealership's letterhead. (See Table 1 beginning at page 83.)
 - Review the background information sheet and complete it by adding facility-specific information, including descriptions of the:
 - Service area where the B0D will be conducted (**Note: this should be the same location where you are/were conducting the Tacoma LSC 90D**);
 - Storage area to be used for B0D materials; and
 - Ventilation system in the area where the B0D will be conducted.
 - **Remember - Enclose the following with the cover letter to the appropriate fire code enforcement official:**
 - The **Determination of Compliance letter prepared by C³**;
 - The **completed dealership information sheet** from Appendix A2.
 - **Copies of the Material Safety Data Sheets (MSDSs)** for the 712AM and Noxudol 300S materials (provided in the Air

Recordkeeping Section of this Guide and on the C.L.E.A.N. Dealer website - <http://cleandealer.com>).

- Make a copy of the letter and attachments for your records before submitting to the appropriate fire code enforcement official.

**APPENDIX A2: Model Letter for IFC/NFPA 33 Jurisdictions and
B0D Process Information to be included with Letter**

*Electronic Copy of Letter and Attachments are available on the on
the C.L.E.A.N. Dealer website - <http://cleandealer.com>.*

(This page intentionally left blank.)

[DEALER LETTERHEAD]

[Insert Appropriate Local Fire Code Enforcement Official Contact Information from Table 1 on page 83]

Re: **NOTIFICATION OF INTENT TO CONDUCT CORROSION-RESISTANT COMPOUND CAMPAIGN IN THE APPROVED SPRAYING AREA OF [LOCAL DEALERSHIP]**

Dear _____:

In November 2009, Toyota announced a safety recall for certain Model Year '00-'03 Tundras. In conjunction with the recall, Tundra Corrosion-Resistant Compound Campaign B0D (B0D) is being implemented to apply Corrosion-Resistant Compound (protective sealant) to Model Year 2000-2003 Tundra vehicles registered in certain cold climate states, including Tennessee. Our dealership is taking part in this B0D. We are writing to provide you with information about the B0D process and to inform you that we intend to begin offering the program on [Insert Date 10 days from now], unless we hear from you otherwise.

Our dealership previously obtained your office's approval to conduct a Limited Service Campaign (LSC) 90D for Tacoma vehicles at our facility located at [insert address]. We contacted you earlier this year to inform you that we would be continuing to offer the Tacoma LSC 90D at our dealership through the end of 2011. In that letter we indicated that Toyota had announced its intention to offer a separate Corrosion-Resistant Compound Campaign to owners of certain model year Tundra vehicles. This B0D is the Tundra campaign that we were referring to and we will be conducting the B0D Tundra campaign in the same approved location where we are currently conducting the Tacoma LSC 90D.

The B0D will involve the spray application of two Class IIIB combustible liquids to the frames of certain model year Tundra trucks. Note the Tacoma LSC 90D involves the spraying of a Class II combustible liquid; however, Toyota has transitioned to a less volatile, Class IIIB combustible liquid for its future undercoating campaigns, including the B0D. The attached documents explain the B0D process, provide a description of the method for applying those materials, confirmation of the location in our vehicle service area where the B0D will take place, and include MSDSs for the materials that will be used. We believe this information demonstrates that the B0D will be conducted in accordance with all applicable laws, regulations, and other codes and is acceptable to your office, as it complies with your previous approval of undercoating operations at our dealership.

For your information, we have attached the following to this letter: (1) a description of the B0D process, materials and equipment; (2) a Determination of Compliance finding that the B0D as designed conforms to the IFC and NFPA 33 and (3) site-specific information confirming the location where we will conduct the B0D is the same location you have already approved for undercoating operations.

If you have any questions or require any additional information, please do not hesitate to contact [Dealership] or [Number]. Thank you for your time and consideration.

Best regards,

Attachments:

- C³ Determination of Compliance, with description of BOD Process and BOD Material MSDSs
- Dealership information sheet

**ATTACHMENT 1: DETERMINATION OF COMPLIANCE AND DESCRIPTION OF THE B0D
PROCESS FROM COMMERCIAL CONSTRUCTION CONSULTING, INC.**

(This page intentionally left blank.)



July 15, 2011

Toyota Motor Sales, U.S.A., Inc.
19001 South Western Avenue, HQ 11
Torrance, CA 90501

**Re: Toyota Corrosion-Resistant Compound Application Program
Compliance with the International Fire Code and the National Fire Code**

Thank you for engaging Commercial Construction Consulting, Inc. ("C3") to determine compliance with applicable fire code regulations in advance of Toyota Motor Sales' implementation of a program involving the application of two corrosion-resistant compounds (the "CRC Program") to the frame rails on the underside of certain Toyota vehicles.

The City of Bristol has adopted the National Fire CodeTM (2006), which includes NFPA 33 (2003) for spraying of flammable and combustible materials. We have also analyzed the 2006 International Fire Code ("IFC") as published by the International Code Council ("ICC"), as has also been adopted by the City of Bristol. Where there is a conflict between the NFPA and IFC provisions, the more restrictive provision applies.

We recommend that Toyota instruct its dealers to conduct this CRC Program in the same spray space where its dealers had received approval to conduct a similar program known as the Limited Service Campaign (LSC) 90D. However, whereas the LSC 90D involves spray application of a Class II and a Class IIIB combustible liquid, this CRC Program will use the same Class IIIB material, but will substitute a less combustible Class IIIB liquid for the Class II liquid.

We have determined that the CRC Program will be in compliance with the applicable provisions of NFPA 33 (2003) and the IFC. We have further determined that as long as the CRC Program is conducted in the spray space previously approved for the LSC 90D, and in accordance with operational requirements of the Code's vehicle undercoating exemption, then the CRC Program continues to qualify for the exemption in paragraph 12.1.1 and further approval should not be required.

NFPA-33 (2003)

Section 12.1 notes that spraying operations using automobile undercoating materials are exempt from the provisions of NFPA-33 when adequate ventilation is provided and if certain requirements are met:

Regulation: *Section 12.1 (Automobile Undercoating and Body Lining):*

12.1.1: Spray undercoating or spray body lining of vehicles that is conducted in an area that has adequate natural or mechanical ventilation shall be exempt from the provisions of this standard, if all of the requirements of 12.1.1.1 through 12.1.1.4 are met.

12.1.1.1: There shall be no open flames or spark-producing equipment within 20 ft (6100 mm) of the spray operation while the spray operation is being conducted.

12.1.1.2: There shall be no drying, curing, or fusion apparatus in use within 20 ft (6100 mm) of the spray operation while the spray operation is being conducted.

12.1.1.3: Any solvent used for cleaning procedures shall have a flash point not less than 100°F (37.8°C).

12.1.1.4: The coating or lining materials used shall meet one of the following criteria:

- (1) Be no more hazardous than UL Class 30-40, when tested in accordance with UL 340, Test for Comparative Flammability of Liquids*
- (2) Not contain any solvent or component that has a flash point below 100°F (37.8°C)*



(3) *Consist only of Class IIIB liquids and not include any organic peroxide catalyst*

Analysis: The CRC Program meets the requirements in paragraph 12.1.1 and therefore qualifies for the undercoating exemption in NFPA-33 (2003): 1) Both materials to be used are Class IIIB; 2) We recommend that dealers be instructed to apply the materials in the same spray space that already has been approved for a similar corrosion-resistant compound program known as the “LSC 90D”; and 3) Dealers also must be instructed to maintain adequate ventilation in this approved spray space and otherwise to conduct the CRC Program in a manner that meets operational requirements of the Code’s vehicle undercoating exemption.

2006 International Fire Code

Section 1504.2 of the 2006 IFC lists the locations in buildings where spray finishing operations may be conducted. The Exception notes that spraying operations using Class III materials are exempt from the provisions of Section 1504 when adequate ventilation is provided and where otherwise approved by the local fire official:

Regulation: *Section 1504.2 (Location of spray-finishing operations): Spray finishing operations conducted in buildings used for Group A, E, I or R occupancies shall be located in a spray room protected with an approved automatic sprinkler system installed in accordance with standard 903.3.1.1 and separated vertically and horizontally from other areas in accordance with the International Building Code. In other occupancies, spray-finishing operations shall be conducted in a spray room, spray booth, or spraying space approved for such use.*

Exception: *Automobile undercoating operations and spray-on automotive lining operations conducted in areas with approved natural or mechanical ventilation shall be exempt from the provisions of Section 1504 when approved and where utilizing Class IIIA or Class IIIB combustible liquids.*

Analysis: The CRC Program meets the requirements in Section 1504.2 and therefore qualifies for the undercoating exemption in the IFC, because 1) Both materials to be used are Class IIIB; 2) We recommend that dealers be instructed to apply the materials in the same spray space that already has been approved for a similar corrosion-resistant compound program known as the “LSC 90D”; and 3) Dealers also must be instructed to maintain adequate ventilation in this approved spray space and otherwise to conduct the CRC Program in a manner that meets operational requirements of the Code’s vehicle undercoating exemption.

Dealers should be able to conduct the CRC Program in the same approved spray area where they conducted the LSC 90D without seeking further approval. Nonetheless, we recommend that dealers notify their local fire official of their intent to conduct the CRC Program in this already-approved spray space and provide the official with the material safety data sheet (MSDS) for the Class IIIB material that will be used in the CRC Program.

If a dealer chooses to conduct the CRC Program in a different service bay from the one previously approved, then the operations at the new bay must comply with the requirements for an exemption under NFPA-33 Section 12.1 and the IFC Section 1504.2, and the dealer must obtain from the local fire official approval to conduct the CRC Program in the new spray space.

If you have any questions, please do not hesitate to call.

Very truly yours,

Doug Anderson
Manager, Code Advisory Group

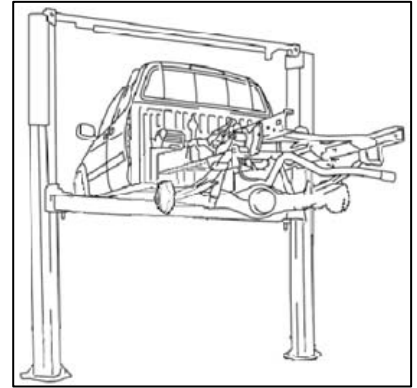
TUNDRA B0D PROCESS OVERVIEW

Step 1: Initial Work Area Setup. Locate dedicated work area in dealership's garage that has a vehicle lift, is well ventilated and can be sectioned off with temporary partitions. No physical alteration of the workspace or installation of new equipment is required for the B0D. The work area previously used for the Tacoma 90D LSC should be used if it is large enough to accommodate the Tundra.

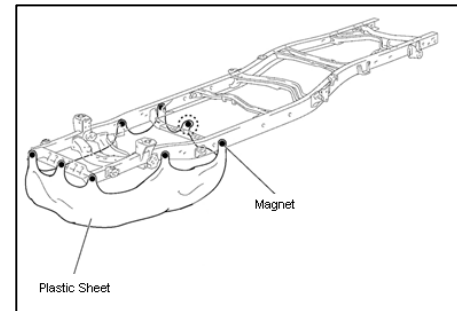
Step 2: Vehicle Preparation. Dealers will employ the following procedures to prepare their service areas and vehicles for spraying.

- Remove truck bed assembly.
- Clean frame, if necessary. It may be necessary to clean the frame, 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 (e.g., tires and wheels, spare tire, engine under cover).
- 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, wire brush, and/or compressed air.
- Mask parts. Mask areas not to be sprayed (e.g., drive shaft, brake/hub assemblies, exhaust).
- Attach Plastic Sheet: To capture any 712AM that may drip through small holes in the frame, use magnets to suspend a plastic sheet underneath the front portion of the frame.

Tundra on Lift with Bed Removed



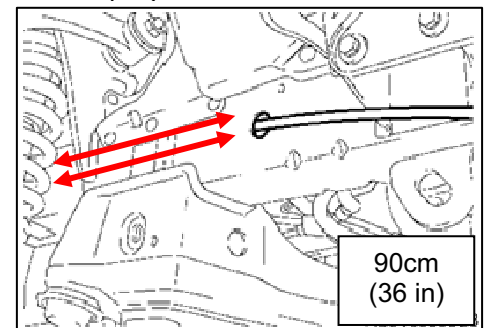
Attachment of Plastic Sheet to Capture any 712AM Drips



Step 3: CRC Application. Dealers will apply the Corrosion Resistant Compounds as follows:

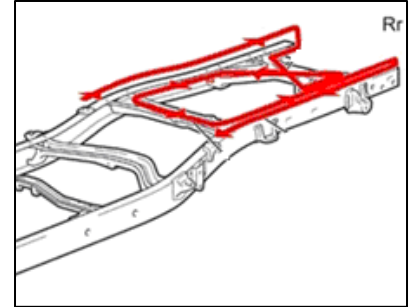
- Apply 712AM. Set up Vaupel spray gun and insert 360° spray nozzle a specified distance into selected holes in the frame. Press spray gun trigger and pull out nozzle at fixed speed while spraying interior surface of frame with one liter of 712AM. When finished, insert rubber plugs and foam blocks to keep 712AM in the frame.

360° Spray Wand Inserted into Frame



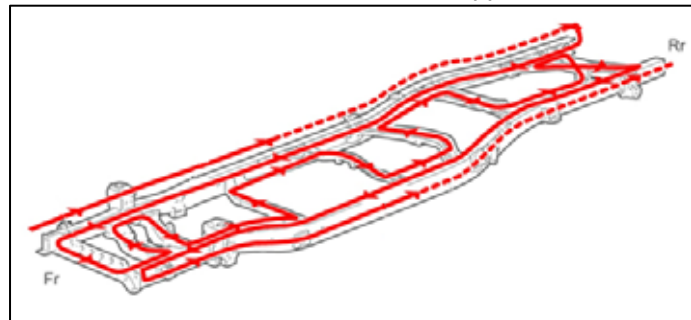
- Remove plastic sheet suspended from frame.
- Lower lift. Lower the lift until the top of the rear portion of the frame is approximately 4'6" above the floor.
- Apply Noxudol 300 S to top external surface of rear portion of frame.
Set up Vaupel spray gun and locate unidirectional handheld spray nozzle 4-8 inches from frame surface. Press spray gun trigger and spray Noxudol 300 S on the top of rear portion of the frame by moving spray nozzle at fixed speed across frame surface.
- Reattach truck bed assembly.

*Top Surface of Rear Frame Portion
Where Noxudol 300 S is Applied*



- Raise truck on lift.
- Apply Noxudol 300 S to frame bottom and side external surfaces. From the same working distance, press spray gun trigger and apply remaining Noxudol 300 S to bottom and side external surfaces of entire frame at fixed speed. Refill spray gun with Noxudol 300 S as needed until all three (3) liters of material are used.

*Side and Bottom Surfaces of Frame
where Noxudol 300 S is Applied*



- Final steps. Reinstall components of vehicle; remove all masking; remove truck from lift; and spray Noxudol 300 S on areas of frame previously covered by lift arms. Allow 712AM and Noxudol 300 S to dry overnight before returning vehicle to customer. Comply with any recordkeeping and material handling requirements.

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:
Date of Preparation: November 14, 2007

Revised: March 17, 2011
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, CO₂, 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.



MATERIAL SAFETY DATA SHEET

Noxudol 300 S

Last Updated April 18, 2011

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
Verkstadsgratan 3
S-434 42 Kungsbacka
Sweden
www.auson.se

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

PHONE: +46 300-562000
FAX: +46 300-562001

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

<u>Chemical Name</u>	<u>Amount % by Wt.</u>	<u>CAS Number</u>	<u>OSHA PEL (ppm)</u>	<u>ACGIH STEL (ppm)</u>
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/(%SiO ₂ +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):

MINIMUM 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



MATERIAL SAFETY DATA SHEET

Noxudol 300 S

Last Updated April 18, 2011

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.

64741-88-4

CHEMICAL NAME

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



MATERIAL SAFETY DATA SHEET

Noxudol 300 S

Last Updated April 18, 2011

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	

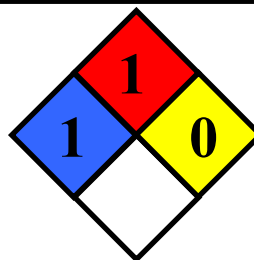


MATERIAL SAFETY DATA SHEET

Noxudol 300 S

Last Updated April 18, 2011

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)

Part Number: --

Approved By: Soken Trade Corporation

Approval Date: April 18, 2011

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

(This page intentionally left blank.)

ATTACHMENT 2: DESCRIPTION OF LOCATION WHERE THE BOD WILL TAKE PLACE AT [INSERT NAME OF DEALERSHIP]

- We will conduct the BOD in our existing dealership service area located at [Insert Dealer Address]. Our dealership has a valid certificate of occupancy for vehicle service and is compliant with existing fire, building, mechanical, and zoning codes for vehicle service/repair garages.

Insert description of the service area at your dealership where the BOD will be conducted.

- We will store BOD materials in accordance with applicable codes governing the storage of combustible liquids.

Insert a description of the storage area to be used for BOD materials.

- We will ensure that the BOD is conducted in an area that has adequate ventilation.

Insert a description of the method of ventilation in the vehicle service area where the BOD will be conducted.

(This page intentionally left blank.)

**TUNDRA CORROSION-RESISTANT COMPOUND CAMPAIGN B0D
TENNESSEE/VIRGINIA DEALER INFORMATION PACKET
(FOR TENNESSEE DEALERS SERVICING VIRGINIA-REGISTERED TUNDRAS)**

GUIDE TO FEDERAL, STATE AND LOCAL REQUIREMENTS

HAZARDOUS WASTE MANAGEMENT SECTION

The materials used in the Tundra B0D – 712AM and Noxudol 300 S – are not considered hazardous waste when they are discarded. In addition, as is the case for the Tacoma LSC 90D, the B0D spray guns do not need to be cleaned as long as you store them in accordance with the Technical Instructions. Therefore, the B0D should not generate any hazardous waste and any discarded materials used exclusively for performing the B0D – such as the plastic sheet suspended from the frame or the plastic bags used to cover the brake assemblies during spraying – do not need to be managed as hazardous waste. Such B0D-exclusive waste will not count toward your monthly hazardous waste generation totals.

However, one of the materials used in the LSC 90D – X128T – may be considered a hazardous waste when discarded due to its combustibility. Therefore, if, as we assume, the B0D will occur in the same spray space as the LSC 90D, there may be common materials, such as floor tarps and rags used for cleanup, that if discarded will need to be managed as hazardous waste. Such materials will count toward your monthly waste generation totals and may impact your generator status.

To ensure proper waste handling, you should develop a procedure at your dealership for distinguishing between 3 categories of waste: (1) B0D-only, (2) LSC 90D-only, and (3) combined B0D and LSC 90D wastes. Categories (2) and (3) will need to be managed as hazardous waste, while Category (1) will not. To assist in your compliance, this section provides a brief overview of the hazardous waste requirements applicable to dealerships generally.

Regulatory Note Regarding EPA ID Number: *Prior to beginning the LSC 90D, your dealership should have obtained an EPA Hazardous Waste ID Number if it did not already have one. Although the B0D should not generate any hazardous waste, as discussed above, if you conduct the B0D in the same spray space as the LSC 90D you will need to manage any 90D-only or B0D-90D combined waste from the common B0D-LSC 90D spray space as hazardous waste, which requires an EPA Hazardous Waste ID Number. The EPA ID Number requirement applies to each location at your dealership with a separate mailing address. If you do not have an EPA Hazardous Waste ID Number for the building where the B0D and LSC 90D will be conducted, the LSC 90D Dealer Information Packet explains how to obtain one.*

Regulatory Note Regarding B0D Tarps and Partitions: *If, as we assume, the LSC 90D and B0D are conducted in a common spray space, the tarps/partitions used should be managed like other hazardous waste when you dispose of them. The weight of these tarps counts against the monthly hazardous waste management limits noted in Section 3 below. Given their size and weight, the tarps/partitions could represent a large quantity of waste if disposed of frequently and could impact your compliance with the limits noted below. Therefore, we recommend that you reuse the tarps and other materials used to create the partitions described in the **Technical Instructions**.*

1. **IF YOU ARE ALREADY A REGISTERED SMALL QUANTITY GENERATOR (SQG) (I.E., BECAUSE YOU GENERATE MORE THAN 220 POUNDS OF HAZARDOUS WASTE PER MONTH), YOU MAY STOP READING AS YOU ARE LIKELY ALREADY FAMILIAR WITH THE REQUIREMENTS NOTED BELOW. THE B0D WILL NOT IMPACT YOUR GENERATOR STATUS.**
2. **IF YOU ARE NOT A SMALL QUANTITY GENERATOR, DO NOT GENERATE MORE THAN 220 POUNDS OF HAZARDOUS WASTE PER MONTH, OR ACCUMULATE MORE THAN 2,200 POUNDS OF HAZARDOUS WASTE AT ANY TIME, THE B0D WILL NOT IMPACT YOUR GENERATOR STATUS.**

- a. Your dealership will not have to become a registered SQG (and thereby be subject to additional requirements) if you stay below the two registered SQG triggers:
 - (1) Generate no more than 220 pounds of hazardous waste in a calendar month; and
 - (2) Accumulate no more than 2,200 pounds of hazardous waste at any one time.

Important Compliance Note. *The 220 pounds per month waste generation level and the 2,200 pounds accumulation level apply separately to each part of your dealership that has its own address and its own EPA ID Number.*

3. **STORE ALL HAZARDOUS WASTES IN PROPER CONTAINERS WITH PROPER LABELS, AND MAINTAIN REQUIRED RECORDS.**
4. **DISPOSE OF ALL HAZARDOUS WASTE ONLY AT FACILITIES AUTHORIZED TO RECEIVE "HAZARDOUS" WASTE USING A COMPANY LICENSED TO TRANSPORT SUCH WASTE TO THE DISPOSAL FACILITY.**
5. **REMEMBER TO COUNT USED OIL AGAINST YOUR MONTHLY HAZARDOUS WASTE LIMIT IF YOU DETERMINE IT TO BE HAZARDOUS.**

- a. In Tennessee, used oil generally must be managed as hazardous waste if it is been mixed with hazardous waste and exhibits a hazardous waste characteristic. As a result, used oil - if it meets this condition - must be counted towards the 220 pounds per month level for exemption from more significant regulated waste requirements.

- b. Such material regulated as used oil should be recycled in accordance with applicable used oil regulations. We assume that your dealership generates used oil, and therefore, is already familiar with the special hazardous waste recycling requirements for used oil.

(This page intentionally left blank.)