

Michael Vergamini

From: Michael Zeiders <mzeiders@libertyenviro.com>
Sent: Monday, October 23, 2023 11:56 AM
To: Michael Vergamini
Cc: 'Jason M. Sharpe - Unit #1 Management'
Subject: [EXTERNAL] FW: JLG Industries, Inc. - Construction Permit Application - Facility ID 45-0188
Attachments: Rust Inhibitor.pdf; 2a - Phosphate Additive ZIRCOBOND ADD P SDS.pdf; 1 - Alkaline Cleaner & Degreaser ULTRAX 32 SDS.pdf; 2 - Zirconium Based Sealer XBOND 4000 SM SDS.pdf; 2 - Zirconium Based Sealer XBOND 4000 SR SDS.pdf; Attachment D - Emissions 10-23-2023.pdf; TN Information Request Letter 10-02-2023.pdf

***** This is an EXTERNAL email. Please exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email - STS-Security. *****

Dear Mr. Vergamini,

Attached is a response to the information request letter sent by TN regarding JLG's Construction Permit Application (see below). I misspelled your email address in my original correspondence (see below). My apologies.

Please call or email with any questions.

Sincerely,

Michael D. Zeiders | Project Manager | mzeiders@libertyenviro.com | 610.375.9301

LIBERTY ENVIRONMENTAL, INC. | www.libertyenviro.com

Reading: 505 Penn Street, Suite 400 Reading PA 19601 **610.375.9301**

Lancaster: 315 West James Street, Suite 205, Lancaster, PA 17603 **717.517.5000**

Philadelphia: Three Westlakes, 1055 Westlakes Drive, 3rd Floor, Berwyn, PA 19312 **610.727.3848**

New York City: 600 Third Avenue, Second Floor, New York, NY 10016 **212.255.0374**

Air Quality|Natural & Water Resources|Regulatory Compliance|Site Assessment & Remediation

From: Michael Zeiders
Sent: Monday, October 23, 2023 12:40 PM
To: 'Air.Pollution.Control@TN.gov' <Air.Pollution.Control@TN.gov>
Cc: 'Michael.Veragami@tn.gov' <Michael.Veragami@tn.gov>; 'Jason M. Sharpe - Unit #1 Management' <jmsharpe@jlg.com>
Subject: JLG Industries, Inc. - Construction Permit Application - Facility ID 45-0188

Dear Sirs,

This email is in response to your letter of October 2, 2023 (attached) requesting additional information for JLG's Construction Permit Application for our aerial lift manufacturing facility located in Jefferson City, TN. Your questions and our responses are highlighted in the text below. In the future, JLG requests that correspondence be conducted via email to Jason M. Sharpe, Principal Environmental Engineer, JLG, Inc. as the letter of October 2, 2023 took approximately two (2) weeks to arrive via USPS.

Your questions and our responses follow below. If you require any further information, please do not hesitate to contact Jason Sharpe (cc'd on this email) or me.

Sincerely,

Michael D. Zeiders | Project Manager | mzeiders@libertyenviro.com | 610.375.9301

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1. Particulate matter emission calculations are determined in Appendix B for sources 01, 02, 03, and 05 solely by the airflow rating of the exhaust point and a grain loading factor described in TAPCR 1200-03-07-.04(1). While this is appropriate for calculation of the allowable PM emission limit at each exhaust point, the actual emissions and maximum uncontrolled emissions of these sources are not adequately described in the emission calculations. Please provide complete actual and maximum uncontrolled emission calculations for each of these sources, based on maximum hourly abrasive used and mass balances of surface coatings, as appropriate.

See Attachment D. Particulate matter emissions from the surface coating operations were recalculated using coating composition information and anticipated maximum throughputs. Blast booth emissions were recalculated using manufacturer supplied emission factors.

2. No emission calculations are provided for welding emissions. Please provide maximum uncontrolled emission calculations for welding emissions that demonstrate that the emissions are below the insignificant activity thresholds and may be considered an insignificant source of emissions.

See Attachment D. Particulate matter emissions were calculated using USEPA emission factors and anticipated maximum throughputs. PM/PM10 emissions are 2.42 tpy (pre-control) and 0.24 tpy (post-control) which are below the insignificant activity thresholds.

3. Surface coating emissions are assumed using the 3.5 lbs/gallon VOC limit listed in TAPCR 1200-03-18-.20(2), not necessarily the VOC content of the coatings described in the safety data sheets (SDS) provided or the APC 9 form. Please provide updated calculations for the VOC and HAP emissions from surface coating.

See Attachment D. VOC and HAP emissions from the surface coating operations were recalculated using coating composition information and anticipated maximum throughputs.

4. A coating is defined in TAPCR 1200-03-18-.01(11) as "a material applied onto or impregnated into a substrate for protective, decorative, or functional purposes. Such materials include, but are not limited to, paints, varnishes, sealants, adhesives, maskants, and temporary protective coatings." This also includes rust inhibitor materials. Provide a copy of the SDS for the rust inhibitor used and calculations of emissions from the rust inhibitor application process.

See Attached SDS. The rust inhibitor material (ITW Pro Brands – LPS) is supplied in small handheld aerosol cans and is used in post-assembly operations to protect non-coated parts (e.g., bolts, pins, etc.) Maximum annual usage is estimated to be approximately 80 gallons. It has a density of 7.28 lbs/gal and a VOC content of 62.8% resulting in anticipated maximum VOC emissions of 365.7 lbs/yr which is below the insignificant activity threshold.

5. Provide a list of the tanks that comprise the pretreatment wash process and the contents of each tank, including names of chemicals added.

See Attached SDS. There are six (6) tanks in total. Tanks 2, 3, 5, & 6 are all water rinse tanks. Tank 1 is the wash tank (Alkaline Cleaner – Ultrax 32) and Tank 4 is the zirconium sealer (Xbond 4000 either SM or SR depending on which works best) with a phosphate additive (Zircobond Add P). Ultramax 32 is a water-based KOH solution. XBOND/Zircobond are acidic/phosphate solutions. All materials are added to water at <5%.

Tank Capacity

Stage	Gallons	Width	Solution Height	Length	Tank Material
1 st	3,590	16'-0"	2'-6"	12'-0"	3/16" 304 SS
2 nd	2,400	16'-0"	2'-6"	8'-0"	3/16" 304 SS
3 rd	2,400	16'-0"	2'-6"	8'-0"	3/16" 316 SS
4 th	3,590	16'-0"	2'-6"	12'-0"	3/16" 316 SS
5 th	2,400	16'-0"	2'-6"	8'-0"	3/16" 316 SS
6 th	1,800	16'-0"	2'-6"	6'-0"	3/16" 316 SS