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**PERMIT TO  
CONSTRUCT EVALUATION**

<b>Applicant's Name</b>	ENGINEERING POLYMER SOLUTION, VALSPAR
<b>Company ID</b>	127568
<b>Mailing Address</b>	901 W. UNION ST., MONTEBELLO, CA 9064
<b>Equipment Address</b>	SAME AS ABOVE

**EQUIPMENT DESCRIPTION:**

**A/N 475610: (New Construction, Permit to Construct):**

TANK WASHER, HOCKMEYER, MODEL NO. CMX-100, WITH A DECANTING RESERVOIR TANK, ACETONE, 250-GALLON CAPACITY, AN ACETONE RINSE SOLVENT TANK, EQUIPPED WITH A VAPOR RECOVERY SYSTEM.

**A/N 475609:**

TITLE V PERMIT REVISION, DE MINIMIS SIGNIFICANT

**BACKGROUND:**

Engineering Polymers, Valspar filed A/N 475610 on May 2010 as a new construction for installation of tank washing system. Valspar is in business of manufacturing paints, lacquers, stains and other coatings at the facility using mixing pots (permitted). The proposed washing system will clean empty mixing pots that have left- over residual coatings after the pots are used during paint manufacturing. Acetone (Non-VOC) is used as solvent for cleaning.

This facility is in the Title V program, A/N 475609 was filed for the Title V permit revision (de minimis significant). The latest Title V renewal was issued on April 19, 2007. This application is part of the 2nd Title V permit revision since then.

The facility has been operating with a Title V permit since 2001. The facility has been subject to both self-reporting requirements and AQMD inspections. The facility has had no citizen complaints, Notices to Comply, or Notices of Violation issued in the last two years.

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**PROCESS DESCRIPTION:**

The paint mixing vessel to be cleaned is placed under the washing machine. After the air-tight lid is secured, about 100 gallons of acetone is pumped from the 250-gallon reservoir tank and circulated through the vessel to remove VOC-containing material. An agitator with a scrapper blade breaks loose any sludge that may have solidified. The cleaning process occurs in closed loop system with built-in vapor recovery system vented to the acetone decanting tank. At the end of cleaning cycle, the waste wash dirty solution is drawn back into the acetone decanting tank. Sludge settled at the bottom of the decant tank is collected and disposed per Hazardous Waste product guidelines. Clean acetone is pumped into the vessel from the rinse solvent tank to give the vessel a final clean rinse. The cleaning cycle lasts about 10 minutes. The clean vessel is then removed from the machine. This process is repeated until the solution in the acetone decant tank is saturated with the acetone solution that cannot be reused. It takes about 40 cleaning cycles between the acetone solution reaches saturation point. At that stage, the solution from the decant tank is disposed as per Hazardous Waste product guidelines and decanting tank is filled with fresh acetone. For more detailed process description, please refer to submittal by the consultant who submitted the application package on behalf of the company.

The operating hours are 3 hours/day, 5 days/week, 50 weeks/yr. The operating hours are based on 1 hour/cleaning cycle. The facility is expected to run a maximum of 3 cleaning cycles/day.

**EMISSIONS AND ANALYSIS:**

**ROG:**

The cleaning operations would generate ROG emissions due to residual leftover of paints, lacquers, stains and other coatings stuck to the mixing vessels and totes during the manufacturing process. The consultant based the ROG emissions calculations based on number of cleaning cycles (60) before the acetone decant tank is completely filled up with acetone solution that no longer can be re-used.

For emissions calculations, data provided by applicant is used.

Amount of VOC in an empty tank to be washed: 0.113 gallons  
Density of Material: 7.3 lb/gal  
Lb. of VOC per tank to be washed: 0.83

R1 VOC= 0.83 lb./wash x 10 wash cycles/day = 8.3 lb/day  
assume that the vapor recovery system is apprx. 92 % efficient.

R2 VOC: 8.3 x (1-0.92) = 0.66 lb/day x 5 days/week x 4.33 weeks/month = 14 lb./month

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### **Toxic Air Contaminants:**

The paint mfg. operation includes use to 3 compounds identified in Rule 1401 under Chronic and Acute risk. They are Methyl Alcohol, Methyl Ethyl Ketone, and Toluene. A fraction of those compounds are emitted during the cleaning operations. Tier 1 analysis performed shows the risk to be less than 1. Therefore, no further analysis is required. Please refer to attached spreadsheet for MICR calculations.

### **RULES:**

- RULE 212(c)(1) This section requires a public notice for all new or modified permit units that may emit air contaminants located within 1,000 feet from the outer boundary of a school. This facility is not located within 1,000 feet from the outer boundary of a school. Therefore, public notice will not be required by this section.
- RULE 212(c)(2) This section requires a public notice for all new or modified facilities which have on-site emission increases exceeding any of the daily maximums as specified in subparagraph (g). The emission increase from this project is less than the daily maximums. Therefore, public notice will not be required by this section.
- RULE 212(c)(3) See Rule 1401 evaluation section. The toxic emissions from this equipment does not result in an MICR of more than one-in-a-million, therefore public notice will not be required by this section.
- RULE 212(g) This section requires a public notice for all new or modified permit units which undergo construction or modifications resulting in an emissions increase exceeding any of the daily maximums as specified in subparagraph (g). The maximum potential VOC emissions from this equipment are less than 0.5 lb/day; therefore, public notice will not be required by this section
- RULE 401 Visible emissions are not expected with proper operation of this equipment.
- RULE 402 Operation of equipment is not expected to create a nuisance.
- RULE 1171 Acetone is used as a clean-up solvent which is considered an exempt compound. Therefore, compliance with this rule is expected.
- REG. XIII 1303(a): The VOC vapors emitted during cleaning are vented back into the acetone decant tank via vapor recovery system thus satisfying BACT requirements.
- 1303(b) (1): The modeling requirements do not apply to ROG emissions at this time.
- 1303(b) (2): External offsets are not required as the 30-day ave. is less than 0.49 lb/day.

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RULE 1401            The chronic and acute hazard index is less than 1. Compliance with this rule is expected.

**Regulation XXX:**

This facility is not in the RECLAIM program. The proposed project is considered as a “de minimis significant permit revision” to the Title V permit for this facility.

Rule 3000(b)(6) defines a “de minimis significant permit revision” as any Title V permit revision where the cumulative emission increases of non-RECLAIM pollutants or hazardous air pollutants (HAPs) from these permit revisions during the term of the permit are not greater than any of the emission threshold levels on the following page:

Air Contaminant	Daily Maximum (lbs/day)
HAP	30
VOC	30
NO <sub>x</sub>	40
PM <sub>10</sub>	30
SO <sub>x</sub>	60
CO	220

To determine if a project is considered as a “de minimis significant permit revision” for non-RECLAIM pollutants or HAPs, emission increases for non-RECLAIM pollutants or HAPs resulting from all permit revisions that are made after the issuance of the Title V renewal permit shall be accumulated and compared to the above threshold levels. This proposed project is the 2nd permit revision to the Title V renewal permit issued to this facility on April 19, 2007. The following table summarizes the cumulative emission increases resulting from all permit revisions since the Title V renewal permit was issued.

**Title V Permit Revisions Summary**

	Revision	HAP	VOC	NO <sub>x</sub>	PM <sub>10</sub>	SO <sub>x</sub>	CO
1 <sup>st</sup>	Permit Revision: Change of Conditions for existing spraybooths and baghouses	0	0	0	0	0	0
2 <sup>nd</sup>	Permit Revision: Installation of Tanks Washing system (a/no. 475610).	0	0	0	0	0	0
	Cumulative Total	0	0	0	0	0	0
	Maximum Daily	30	30	40	30	60	220

Since the cumulative emission increases resulting from all permit revisions are not greater than any of the emission threshold levels, this proposed project is considered as a “de minimis significant permit revision”.

**CONCLUSION:**

The proposed project is expected to comply with all applicable District Rules and Regulations. Since the proposed project is considered as a “de minimis significant permit revision”, it is exempt

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from the public participation requirements under Rule 3006 (b). A proposed facility permit incorporating this permit revision will be submitted to EPA for a 45-day review pursuant to Rule 3003(j). If EPA does not have any objections within the review period, a revised Title V permit will be issued to this facility.