

FACILITY PERMIT REVIEW SHEET

DATE: February 2, 2011

APPLICATION NUMBER: 0310316-005-AF

FACILITY NAME: Fruit Growers Express Company

FACILITY DESCRIPTION: Jacksonville Maintenance Facility

PERMIT PROCESSOR: C. Blane Johnson



MAJOR FOR CRITERIA POLLUTANTS AND/OR HAPs (Circle)

CO PB NO_x PM SO₂ VOC HAP

SUBJECT TO: (Circle)

NSR(PSD)

PERMIT NUMBER: _____

NSR(NAA)

PERMIT NUMBER: _____

BACT

EU NUMBER: _____

MACT

EU NUMBER: _____

RACT

EU NUMBER: 001, 002, 003

NSPS

EU NUMBER: _____

FACILITY EMISSION SUMMARY

	<u>POTENTIAL EMISSIONS</u>		<u>ALLOWABLE EMISSIONS</u>	
	<u>Uncontrolled</u>	<u>Controlled</u>	<u>LBS/HR</u>	<u>TPY</u>
PM	<u>n/a</u>	<u>11.4</u>	<u>59.5</u>	<u>91.7</u>
PM10	_____	_____	_____	_____
SO ₂	_____	_____	_____	_____
NO _x	_____	_____	_____	_____
CO	_____	_____	_____	_____
VOC	<u>690</u>	<u>94.5</u>	<u>157.5</u>	<u>94.5</u>
TOC	_____	_____	_____	_____
PB	_____	_____	_____	_____
TOTAL HAP	<u>373</u>	<u>13.1</u>	<u>84.9</u>	<u>24.0</u>
SINGLE HAP (highest)	<u>270</u>	<u>9.8</u>	<u>61.6</u>	<u>9.8</u>

COMMENTS: _____

EMISSIONS CALCULATIONS

APPLICATION NUMBER: 0310316-005-AF

EU NUMBER: 001

REFERENCES: 0310316-004-AF and 0310316-005-AF application

POLLUTANT: Particulate Matter (PM)

ALLOWABLE EMISSIONS

<u>LBS/HR</u>	<u>TPY</u>	<u>% OPACITY</u>	<u>CONCENTRATION</u>	<u>OTHER</u>
<u>10.8</u>	<u>47.3</u>	<u>5</u>	0.03 gr/dscf	

POTENTIAL EMISSION CALCULATIONS

$$\begin{array}{rcccccc} \text{baghouse exhaust flowrate(ft}^3\text{/min)} \times \text{emission rate(gr/ft}^3\text{)} / 7000 \text{ gr/lb} \times 60 \text{ min/hr} & = & \text{PTE} \\ 42,000 & 0.00025 & 7000 & 60 & = & 0.090 \text{ lb/hr} \\ & & & & = & 0.394 \text{ tons/yr} \end{array}$$

RULE APPLICABILITY:	<u>FEDERAL</u>	<u>STATE</u>	<u>LOCAL</u>
	<u> </u>	62-296.712(2)	<u>2.1101</u>

COMMENTS: _____

PERMIT PROCESSOR: R. Blum jr DATE: 2/2/11

EMISSIONS CALCULATIONS

APPLICATION NUMBER: 0310316-005-AF

EU NUMBER: 002

REFERENCES: 0310316-004-AF and 0310316-005-AF application

POLLUTANT: Volatile Organic Compounds (VOC)

ALLOWABLE EMISSIONS

<u>LBS/HR</u>	<u>TPY</u>	<u>% OPACITY</u>	<u>CONCENTRATION</u>	<u>OTHER</u>
<u>157.5</u>	<u>100</u>		<u>3.5 lb/gal</u>	

POTENTIAL EMISSION CALCULATIONS

Uncontrolled -

$$\text{maximum application rate (gal/hr)} \times \text{maximum VOC concentration (lb/gal)} = \text{PTE}$$
$$\begin{aligned} 45.0 \quad 3.5 &= 157.5 \text{ lb/hr} \\ &= 689.9 \text{ tons/yr} \end{aligned}$$

Controlled -

$$\frac{\{[\text{Water based paint usage (gal/yr)} \times \text{maximum VOC concentration (lb/gal)}] + [\text{Solvent based paint usage (gal/yr)} \times \text{maximum VOC concentration (lb/gal)}] + [\text{Solvent usage (gal/yr)} \times \text{maximum VOC concentration (lb/gal)}]\}}{2000 \text{ lb/ton}}$$

90,000	1.63	10,000	3.5	1000	7.25	2000	=	94.5 tons/yr
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RULE APPLICABILITY: FEDERAL STATE LOCAL

62-296.513(2)(a)(2)

2.1101

COMMENTS: Federally enforceable annual limit requested by permittee to avoid Title V and MACT.

The annual limit (tons/yr) is a 12 month rolling total.

POLLUTANT: Ethylbenzene

ALLOWABLE EMISSIONS

<u>LBS/HR</u>	<u>TPY</u>	<u>% OPACITY</u>	<u>CONCENTRATION</u>	<u>OTHER</u>
	10			

POTENTIAL EMISSION CALCULATIONS

Uncontrolled

maximum application rate (gal/hr) x maximum Ethylbenzene concentration (lb/gal) = PTE

$$\begin{array}{rclcl} 45.0 & 0.43 & = & 19.4 \text{ lb/hr} \\ & & = & 84.8 \text{ tons/yr} \end{array}$$

Controlled -

{[Solvent based paint usage (gal/yr) x maximum Ethylbenzene concentration (lb/gal)] + [Solvent usage (gal/yr) x maximum Ethylbenzene concentration (lb/gal)]} / 2000 lb/ton

$$10,000 \quad 0.43 \quad 1000 \quad 1.45 \quad 2000 \quad = \quad 2.9 \text{ tons/yr}$$

RULE APPLICABILITY: FEDERAL STATE LOCAL

62-296.513(2)(a)(2) 2.1101

COMMENTS: Federally enforceable annual limit requested by permittee to avoid Title V and MACT.
The annual limit (tons/yr) is a 12 month rolling total.

POLLUTANT: Toluene

ALLOWABLE EMISSIONS

<u>LBS/HR</u>	<u>TPY</u>	<u>% OPACITY</u>	<u>CONCENTRATION</u>	<u>OTHER</u>
	10			

POTENTIAL EMISSION CALCULATIONS

Uncontrolled

maximum application rate (gal/hr) x maximum Toluene concentration (lb/gal) = PTE

$$\begin{array}{rclcl} 45.0 & 0.20 & = & 9.0 \text{ lb/hr} \\ & & = & 39.4 \text{ tons/yr} \end{array}$$

Controlled -

{[Solvent based paint usage (gal/yr) x maximum Toluene concentration (lb/gal)] + [Solvent usage (gal/yr) x maximum Toluene concentration (lb/gal)]} / 2000 lb/ton

$$10,000 \quad 0.20 \quad 1000 \quad 3.61 \quad 2000 \quad = \quad 2.8 \text{ tons/yr}$$

RULE APPLICABILITY: FEDERAL STATE LOCAL

62-296.513(2)(a)(2) 2.1101

COMMENTS: Federally enforceable annual limit requested by permittee to avoid Title V and MACT.
The annual limit (tons/yr) is a 12 month rolling total.

EMISSIONS CALCULATIONS

APPLICATION NUMBER: 0310316-005-AF

EU NUMBER: 003

REFERENCES: 0310316-004-AF and 0310316-005-AF application

POLLUTANT: Particulate Matter (PM)

ALLOWABLE EMISSIONS

<u>LBS/HR</u>	<u>TPY</u>	<u>% OPACITY</u>	<u>CONCENTRATION</u>	<u>OTHER</u>
<u>7.7</u>	<u>33.7</u>	<u>5</u>	<u>0.03</u>	

POTENTIAL EMISSION CALCULATIONS

baghouse exhaust flowrate(ft ³ /min) x emission rate(gr/ft ³) / 7000 gr/lb x 60 min/hr = PTE					
30,000	0.00025	7000	60	=	0.064 lb/hr
				=	0.282 tons/yr

RULE APPLICABILITY:	<u>FEDERAL</u>	<u>STATE</u>	<u>LOCAL</u>
		62-296.712(2)	<u>2.1101</u>

COMMENTS: _____

PERMIT PROCESSOR: L. Blum DATE: 2/2/11

Effective 2/27/97

EMISSIONS CALCULATIONS

APPLICATION NUMBER: 0310316-005-AF

EU NUMBER: 004

REFERENCES: 0310316-004-AF and 0310316-005-AF application

POLLUTANT: Particulate Matter (PM)

ALLOWABLE EMISSIONS

LBS/HR

TPY

% OPACITY

CONCENTRATION

OTHER

520 hr/yr

POTENTIAL EMISSION CALCULATIONS

$$\text{Blast media usage (lb/hr)} \times \text{emission rate (lb PM/lb media)} = \text{PTE}$$

1,000	0.041	=	41.0	lb/hr
		=	10.7	tons/yr

RULE APPLICABILITY:

FEDERAL

STATE

LOCAL

62-296.320(4)(c)

2.1101

COMMENTS: Unconfined emission point, use reasonable precautions

PERMIT PROCESSOR:

DATE:

Effective 2/27/97

EMISSIONS CALCULATIONS

APPLICATION NUMBER: 0310316-005-AF

EU NUMBER: 005

REFERENCES: 0310316-004-AF and 0310316-005-AF application

POLLUTANT: Particulate Matter (PM)

ALLOWABLE EMISSIONS

<u>LBS/HR</u>	<u>TPY</u>	<u>% OPACITY</u>	<u>CONCENTRATION</u>	<u>OTHER</u>

POTENTIAL EMISSION CALCULATIONS

$$\begin{array}{ccccccc} \text{baghouse exhaust flowrate(ft}^3/\text{min)} \times \text{emission rate(gr/ft}^3) / 7000 \text{ gr/lb} \times 60 \text{ min/hr} & = & \text{PTE} \\ 3,000 & 0.03 & 7000 & 60 & = & 0.77 & \text{lb/hr} \\ & & & & = & 3.38 & \text{tons/yr} \end{array}$$

RULE APPLICABILITY:	<u>FEDERAL</u>	<u>STATE</u>	<u>LOCAL</u>
	<u> </u>	<u>62-210.300(b)(1)</u>	<u>2.301</u>

COMMENTS: RACT PM does not apply to this EU. This EU meets the requirements of 62-210.300(b)(1) and is exempt from permitting.

PERMIT PROCESSOR: C. D. Ham Jr. DATE: 3/4/11