



**Lane Regional Air Protection Agency
Simple Air Contaminant Discharge Permit**

Review Report

A&K Development Company
410 Chambers Street
Eugene, OR 97402
Website: <http://www.akdco.net>

Permit No. 200042

Source Information:

Primary SIC	3556 – Food Products Machinery
Secondary SIC	--
Primary NAICS	333241 – Food Products Manufacturing Machinery
Secondary NAICS	--
Source Categories (LRAPA Title 37, Table 1)	Part B: 69. Surface coating operations: coating operations whose actual or

	expected usage of coating materials is greater than 250 gallons per month, excluding sources that exclusively use non-VOC and non-HAP containing coatings
Public Notice Category	I

Compliance and Emissions Monitoring Requirements:

Unassigned Emissions	N
Emission Credits	N
Special Conditions	N
Compliance Schedule	N

Source Test [date(s)]	N
COMS	N
CEMS	N
Ambient monitoring	N

Reporting Requirements

Annual Report (due date)	February 15
SACC (due date)	N
GHG Report (due date)	N
Quarterly Report (due date)	N

Monthly Report (due dates)	N
Excess Emissions Report	Y
Other Reports (due date)	N

Air Programs

NSPS (list subparts)	N
NESHAP (list subparts)	HHHHHH (6H)
CAM	N
Regional Haze (RH)	N
Synthetic Minor (SM)	N
SM-80	N
Title V	N
Part 68 Risk Management	N
ACDP (SIP)	N
Major FHAP Source	N
Federal Major Source	N
New Source Review (NSR)	N
Prevention of Significant Deterioration (PSD)	N
Acid Rain	N
Clean Air Mercury Rule	N

(CAMR)	
TACT	N
>20 Megawatts	N

Permittee Identification

1. A&K Development Company ('A&K Development' and/or 'the facility') operates a food processing equipment manufacturing facility at 410 Chambers Street in Eugene, Oregon.

General Background

2. The facility manufactures heavy equipment used in the processing of crops such as corn. The significant emission units at the facility include two (2) spray booths for painting manufactured equipment and general welding activities. The particulate matter emissions from paint overspray in the spray booths are controlled by dry filters.

Reasons for Permit Action and Fee Basis

3. This permit action is a non-PSD/NSR simple technical permit modification to an existing Simple Air Contaminant Discharge Permit (Simple ACDP) to include the requirements under 40 CFR 63 subpart HHHHHH (6H) - National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources. During a review of the 2020 Air Toxics Emission Report, LRAPA discovered that one of the coatings spray applied at the facility contains a lead compound. Lead (Pb) is one of the target HAPs of concern under 40 CFR 63 subpart 6H, in addition to chromium (Cr), manganese (Mn), nickel (Ni), or cadmium (Cd).

Attainment Status

4. The facility is located inside the Eugene Springfield Air Quality Management Area. The facility is located in an area that has been designated an attainment area for PM_{2.5}, NO₂, SO₂, Ozone, and Pb and a maintenance area for CO and PM₁₀.

Permitting History

5. LRAPA has reviewed and issued the following permitting actions to this facility:

Date(s) Approved/Valid	Permit Action Type	Description
08/18/2010-08/18/2020	Basic ACDP	Initial air permit
12/11/2014-12/11/2019	Simple ACDP	Source moved to Simple ACDP
01/11/2021-01/11/2026	Simple ACDP	Renewal of Simple ACDP

Compliance History

6. LRAPA has not initiated any enforcement actions against this facility.

Source Testing

7. The facility is not required to conduct source testing at this time. LRAPA is not aware of any historical source testing conducted at this facility.

Emission Unit Description

8. The facility has the following significant emission units:

Emission Unit	EU ID	Pollution Control Device	PCD ID
One (1) Paint Booth	EU-Surface Coating	Dry Filters	NA
Welding Activities	EU-Welding	None	None

9. The facility has the following aggregate insignificant emission units:

Emission Unit	EU ID	Pollution Control Device	PCD ID
One (1) Bead Blast Booth	None	Baghouse	None

One (1) Sandblast Booth	None	Baghouse	None
-------------------------	------	----------	------

Specific Emission Limitations

10. The emission units at this facility are subject to the visible emission limitations under LRAPA 32-010(3). These emission units may not have visible emissions equal to or greater than 20% opacity for a period or periods aggregating more than three (3) minutes in any one (1) hour.
11. The emission units at this facility are subject to particulate matter emission limitations under LRAPA 32-015(2)(b). For sources installed, constructed or modified on or after June 1, 1970 but prior to April 16, 2015 for which there are no representative compliance source test results, the particulate matter emission limit is 0.14 grains per dry standard cubic foot.
12. The emission units at this facility are subject to the process weight rate emission limitation under LRAPA 32-045. Particulate matter emissions in any one hour may not exceed the amount shown in LRAPA 32-8010 for the process weight allocated to the process.

Typically Achievable Control Technology (TACT)

13. LRAPA Title 32-008 requires that an existing emission unit at a source to meet TACT if the emissions unit meets the following criteria: the emissions of criteria pollutants are greater than five (5) tons per year of particulate or greater than ten (10) tons per year of any gaseous pollutant, the emissions unit is not subject to the emissions standards under LRAPA Title 30, Title 32, Title 33, Title 38, Title 39, or Title 46 for the pollutants emitted, and the source is required to have a permit. The facility does not currently emit more than 10 tons of VOC per year and is not required to meet TACT for VOC. The facility reported 4.99 tons of VOC emissions in 2020. While the facility is not required to meet TACT at this time, LRAPA has determined that (a) applying coatings in a spray booth fitted with filters demonstrated to achieve at least 98% capture of paint overspray, (b) the use of high volume, low pressure (HVLV) spray guns, electrostatic application, airless spray guns, or air-assisted airless spray guns or equivalent technology, (c) the cleaning of spray guns with cleaning solvents within a containment system, and (d) ensuring and certifying that all personnel, including contract personnel, who spray apply surface coatings, are trained in the proper spray application of surface coatings and the proper setup and maintenance of spray equipment, would likely meet the TACT requirement.

Plant Site Emission Limits (PSELs)

14. Provided below is a summary of the baseline emissions rate, netting basis, and PSELs for this facility. No changes are proposed in any of these values as the result of this modification to the permit.

Pollutant	Baseline Emission Rate (TPY)	Netting Basis		Plant Site Emission Limit (PSEL)		PSEL Increase Over Netting Basis (TPY)	Significant Emission Rate (TPY)
		Previous (TPY)	Proposed (TPY)	Previous PSEL (TPY)	Proposed PSEL (TPY)		
PM	0	0	0	24	24	24	25
PM ₁₀	0	0	0	14	14	14	15
PM _{2.5}	NA	0	0	9	9	9	10
CO	0	0	0	NA	NA	NA	100
NO _x	0	0	0	NA	NA	NA	40
SO ₂	0	0	0	NA	NA	NA	40
VOC	0	0	0	39	39	39	40
GHG	0	0	0	NA	NA	NA	75,000

Pollutant	Baseline Emission Rate (TPY)	Netting Basis		Plant Site Emission Limit (PSEL)		PSEL Increase Over Netting Basis (TPY)	Significant Emission Rate (TPY)
		Previous (TPY)	Proposed (TPY)	Previous PSEL (TPY)	Proposed PSEL (TPY)		
Individual HAP	NA	NA	NA	9	9	NA	NA
Aggregate HAPs	NA	NA	NA	24	24	NA	NA

- 14a. The facility does not have a baseline emission rate for pollutants other than PM_{2.5} and GHGs because the facility was not in operation during either the 1977 or 1978 baseline year. A baseline emission rate is not established for PM_{2.5} in accordance with LRAPA 42-0048(3). The facility has no baseline for GHGs because the facility did not request a baseline for this pollutant.
- 14b. The netting basis for all pollutants is 0 (zero) in accordance with LRAPA 42-0040(3).
- 14c. The PSELs for PM, PM₁₀, PM_{2.5} and VOC are set at the generic PSEL level in accordance with LRAPA 37-0064(3)(b). No PSELs are set for CO, NO_x, SO₂ and GHGs 12 in accordance with LRAPA 42-0020(3)(a) because these pollutants are emitted below the de minimis as defined in LRAPA Title 12. There are no changes to the PSELs as compared to the previous Simple ACDP.
- 14d. The baseline year, netting basis, and SER are not applicable for limiting federal HAPs. There are no changes to the PSELs for HAPs as compared to the previous Simple ACDP.

Federal Hazardous Air Pollutants/Toxic Air Contaminants

- 15. The facility currently has PSELs for federal HAPs that limit emissions to no more than 9 tons per year for an individual federal HAP and 24 tons per year for the aggregate of all federal HAP as shown in the table above. Therefore, the facility is considered a minor or area source of federal HAPs.
- 16. Under the Cleaner Air Oregon program, only existing sources that have been notified by LRAPA and new sources are required to perform risk assessments. This source has not been notified by LRAPA and is therefore, not yet required to perform a risk assessment or report annual emissions of toxic air contaminants. LRAPA required reporting of approximately 600 toxic air contaminants in 2016 and regulates approximately 260 toxic air contaminants that have Risk Based Concentrations established in rule. All federal HAPs are on the list of approximately 600 toxic air contaminants. After the source is notified by LRAPA, they must update their inventory and perform a risk assessment to see if they must reduce risk from their toxic air contaminant emissions. Until then, sources will be required to report toxic air contaminant emissions triennially.
- 17. Provided below is a summary of the potential federal HAP and TAC emissions based on the 2020 Air Emission Inventory and the 2020 Air Toxics Emission Report. In order to calculate the potential emissions from this type of contract facility, this analysis conservatively assumes A&K operates a 3 shift operation instead of their current 1 shift operation. According to the facility they were operating near maximum capacity in 2020. The highest individual federal HAP potential emissions are xylenes at 4.73 TPY. The potential aggregate emissions of all federal HAPs are 10.8 TPY.

Chemical Name (CAS Number)	HAP	TAC	Potential Emissions (TPY)
Organic Compounds			
Acetone (67-64-1)	N	Y	1.54
t-Butyl Acetate (540-88-5)	N	Y	0.15
Butyl Benzyl Phthalate (85-68-7)	N	Y	0.15
Cumene (98-82-8)	Y	Y	1.1E-04
Ethyl Benzene (100-41-4)	Y	Y	1.29
Methyl isoButyl Ketone (108-10-1)	Y	Y	1.43
Methyl Ethyl Ketone (78-93-3)	N	Y	3.50
Methyl Methacrylate (80-62-6)	N	Y	1.5E-02
Tetrachloroethylene (172-18-4)	Y	Y	0.34
Toluene (108-88-3)	Y	Y	3.00
Xylenes (1330-20-7)	Y	Y	4.73
Metal Compounds			
Chromium (III) Compounds	Y	N	4.1E-03
Chromium (VI) Compound	Y	Y	7.7E-05
Cobalt Compounds	Y	Y	7.7E-06
Manganese Compounds	Y	Y	2.7E-03
Nickel Compounds	Y	Y	9.7E-03
Lead Compounds	Y	Y	6.7E-04
Zinc Compounds	N	Y	4.3E-03
Zinc Oxide (1314-13-2)	N	Y	4.3E-03
Total Federal HAP (Individual/Cumulative) =			4.73 / 10.8

Toxics Release Inventory

18. The Toxics Release Inventory (TRI) is federal program that tracks the management of certain toxic chemicals that may pose a threat to human health and the environment, over which LRAPA has no regulatory authority. It is a resource for learning about toxic chemical releases and pollution prevention activities reported by certain industrial facilities. Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) created the TRI Program. In general, chemicals covered by the TRI Program are those that cause:
- Cancer or other chronic human health effects;
 - Significant adverse acute human health effects; or
 - Significant adverse environmental effects.

There are currently over 650 chemicals covered by the TRI Program. Facilities that manufacture, process or otherwise use these chemicals in amounts above established levels must submit annual TRI reports on each chemical. NOTE: The TRI Program is a federal program over which LRAPA has no regulatory authority. LRAPA does not guarantee the accuracy of any information copied from EPA's TRI website.

This facility did not report to the TRI during reporting years 2007-2020.

New Source Performance Standards

19. There are no emission units at this facility for which NSPS have been promulgated or are applicable.

National Emission Standards for Hazardous Air Pollutants (NESHAPs)

20. The potential emissions of federal HAPs from this facility are less than the major source thresholds of 10 TPY for an individual federal HAP and 25 TPY cumulatively for all federal HAPs. As such the facility is considered an area source of federal HAPs.
21. This facility is subject to 40 CFR Part 63, Subpart HHHHHH.(6H) - National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources because the facility spray applies surface coatings that contain at least one of the target HAPs listed in the rule. The target HAPs of concern under 40 CFR 63 subpart 6H are chromium (Cr), manganese (Mn), nickel (Ni), cadmium (Cd), or lead (Pb). The facility does not perform any paint stripping with methylene chloride.
22. LRAPA also reviewed the following NESHAPs to determine their applicability to this facility:
- 22a. 40 CFR Part 63, Subpart MMMM - National Emission Standards for Hazardous Air Pollutants for Surface Coating of miscellaneous Metal Parts and Products is not applicable to the facility because the facility is not a major source of federal HAPs.
 - 22b. 40 CFR Part 63, Subpart PPPP - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products is not applicable to the facility because the facility is not a major source of federal HAPs.
 - 22c. 40 CFR Part 63, Subpart XXXXXX - National Emission Standards for Hazardous Air Pollutants: Nine Metal Fabrication and Finishing Source Categories is not applicable to the source because the facility does not engage in the operations listed in 40 CFR 63.11514(a)

Recordkeeping Requirements

23. The facility is required to keep and maintain a record of the following information for a period of five (5) years.
- 23a. VOC/HAP-containing materials include, but are not limited to, coatings, lacquers, thinners, stains, topcoats, solvents, adhesives, cleaning, and wash-off materials.
 - 23b. The density and VOC/HAP content information must be supplied from CPDS or SDS provided by the manufacturer/supplier of the VOC/HAP containing material.

Activity	Parameter	Units	Minimum Recording Frequency
VOC/HAP-containing material Usage	Material name and usage	Gallons	Monthly
VOC/HAP-containing material Usage	Density of material	Pounds per gallon	Each coating and solvent
VOC- containing material usage	VOC content	% by weight	Each coating and solvent
HAP- containing material usage	Individual HAP content	% by weight	Each coating and solvent
Welding rod/welding wire usage	Rod/wire type and usage	Pounds	Monthly

Activity	Parameter	Units	Minimum Recording Frequency
Spray booth training	Training logs / certifications	NA	Maintain documentation of training
Spray booth filter particulate matter control efficiency	Control efficiency	%	Maintain documentation from each filter manufacturer
Spray booth filter replacement	Occurrence	NA	Upon Replacement
Spray gun equivalency if not using approved spray gun technology	Occurrence	NA	Maintain documentation
Notifications or reports required by 40 CFR 63 subpart 6H	Occurrence	NA	Maintain documentation
Records of any deviation from the requirements in 40 CFR 63 subpart 6H	Occurrence	NA	Maintain documentation
Records of any assessments of source compliance required by 40 CFR 63 subpart 6H	Occurrence	NA	Maintain documentation
Complaints from the public	Log each complaint and the resolution	NA	Upon receipt
Upset log of all planned and unplanned excess emissions	See G15	NA	Per occurrence

Reporting Requirements

24. For each year the permit is in effect, the permittee must submit to LRAPA by February 15th, the following information from the previous calendar year:
- 24a. An annual summary of the total gallons of VOC and HAP-containing materials used;
 - 24b. Calculations of annual VOC and HAP emissions determined each month to demonstrate compliance with VOC and HAP PSEL. The summary must include VOC and HAP emission calculations corresponding to each 12-month rolling period in the previous calendar year;
 - 24c. A list of permanent changes made in facility processes, production levels, and pollution control equipment including any new SDS or CPDS;
 - 24d. A summary of maintenance performed on pollution control equipment;
 - 24e. A summary of complaints related to air quality received by the permittee during the previous calendar year and their resolution; and
 - 24f. A summary of any upsets that resulted in planned and unplanned excess emissions.
 - 24g. An Annual Notification of Changes Report, if applicable, in accordance with 40 CFR 63 subpart 6H.
25. The permittee is not subject to greenhouse gas reporting under OAR 340 Division 215 because actual greenhouse gas emissions are less than 2,500 metric tons (2,756 short tons) of CO₂ equivalents per year. If the source ever emits more than this amount, they will be required to report greenhouse gas emissions.

A&K Development Company
Permit Number: 200042
Expiration Date: January 11, 2026
Modification Date: January 24, 2022

Page 8 of 11

Public Notice

26. The draft permit was on public notice from December 10, 2020 to January 8, 2021. No written comments were submitted during the 30-day comment period. In accordance with paragraph 37-0066(4)(b)(A), as a Non-NSR Simple Technical Permit Modification, Title 31 Category I public notice is required. Category I public notice procedures specify that no prior public notice or opportunity for participation is required.

JJW/rr
01/10/2022



**Lane Regional Air Protection Agency
Simple Air Contaminant Discharge Permit**

Review Report

A&K Development Company
410 Chambers Street
Eugene, OR 97402
Website: <http://www.akdco.net>

Source Information:

Primary SIC	3556 – Food Products Machinery
Secondary SIC	--
Primary NAICS	333241 – Food Products Manufacturing Machinery
Secondary NAICS	--
Source Categories (LRAPA Title 37, Table 1)	Part B: 69. Surface coating operations: coating operations whose actual or

	expected usage of coating materials is greater than 250 gallons per month, excluding sources that exclusively use non-VOC and non-HAP containing coatings
Public Notice Category	II

Compliance and Emissions Monitoring Requirements:

Unassigned Emissions	N
Emission Credits	N
Special Conditions	N
Compliance Schedule	N

Source Test [date(s)]	N
COMS	N
CEMS	N
Ambient monitoring	N

Reporting Requirements

Annual Report (due date)	February 15
SACC (due date)	N
GHG Report (due date)	N
Quarterly Report (due date)	N

Monthly Report (due dates)	N
Excess Emissions Report	Y
Other Reports (due date)	N

Air Programs

NSPS (list subparts)	N
NESHAP (list subparts)	N
CAM	N
Regional Haze (RH)	N
Synthetic Minor (SM)	N
SM-80	N
Title V	N
Part 68 Risk Management	N
ACDP (SIP)	N
Major FHAP Source	N
Federal Major Source	N
New Source Review (NSR)	N
Prevention of Significant Deterioration (PSD)	N
Acid Rain	N
Clean Air Mercury Rule (CAMR)	N

TACT	N
>20 Megawatts	N

Permittee Identification

1. A&K Development Company ('A&K Development' and/or 'the facility') operates a food processing equipment manufacturing facility at 410 Chambers Street in Eugene, Oregon.

General Background

2. The facility manufactures heavy equipment used in the processing of crops such as corn. The significant emission units at the facility include two (2) spray booths for painting manufactured equipment and general welding activities. The particulate matter emissions from paint overspray in the spray booths are controlled by dry filters.

Reasons for Permit Action and Fee Basis

3. This permit action is a renewal for an existing Simple Air Contaminant Discharge Permit (Simple ACDP) which was issued on December 11, 2014 and was scheduled to expire on December 11, 2019. The facility indicated in their renewal application submitted on May 28, 2019 that they were requesting a renewal of an existing permit without changes. Because the actual emissions from calendar year 2019 were less than 10 tons/year for VOCs, the permit action is considered a Simple "low" ACDP renewal under LRAPA 37-0064(2)(a).

Attainment Status

4. The facility is located inside the Eugene Springfield Air Quality Management Area. The facility is located in an area that has been designated an attainment area for PM_{2.5}, NO₂, SO₂, Ozone, and Pb and a maintenance area for CO and PM₁₀.

Permitting History

5. LRAPA has reviewed and issued the following permitting actions to this facility:

Date(s) Approved/Valid	Permit Action Type	Description
08/18/2010-08/18/2020	Basic ACDP	Initial air permit
12/11/2014-12/11/2019	Simple ACDP	Source moved to Simple ACDP

Compliance History

6. LRAPA has not initiated any enforcement actions against this facility.

Source Testing

7. The facility is not required to conduct source testing at this time. LRAPA is not aware of any historical source testing conducted at this facility.

Emission Unit Description

8. The emission units regulated by this permit are the following:

Emission Unit	EU ID	Pollution Control Device	PCD ID
Surface Coating Operations: Two (2) Paint Booths	EU-Surface Coating	Dry Filters	NA
Welding Activities	EU-Welding	NA	NA

Specific Emission Limitations

9. The surface coating operations (EU-Surface Coating) are subject to the visible emission limitations under LRAPA 32-010(3). These emission units may not have visible emissions equal

to or greater than 20% opacity for a period or periods aggregating more than three (3) minutes in any one (1) hour.

10. EU-Surface Coating is subject to particulate matter emission limitations under LRAPA 32-015(2)(b). For sources installed, constructed or modified on or after June 1, 1970 but prior to April 16, 2015 for which there are no representative compliance source test results, the particulate matter emission limit is 0.14 grains per dry standard cubic foot.
11. EU-Surface Coating is subject to the process weight rate emission limitation under LRAPA 32-045. Particulate matter emissions in any one hour may not exceed the amount shown in LRAPA 32-8010 for the process weight allocated to the process.

Typically Achievable Control Technology (TACT)

12. LRAPA Title 32-008 requires that an existing emission unit at a source to meet TACT if the emissions unit meets the following criteria: the emissions of criteria pollutants are greater than five (5) tons per year of particulate or greater than ten (10) tons per year of any gaseous pollutant, the emissions unit is not subject to the emissions standards under LRAPA Title 30, Title 32, Title 33, Title 38, Title 39, or Title 46 for the pollutants emitted, and the source is required to have a permit. The facility does not currently emit more than 10 tons of VOC per year and is not required to meet TACT for VOC. The facility reported 5.66 tons of VOC emissions in 2019. While the facility is not required to meet TACT at this time, LRAPA has determined that (a) applying coatings in a spray booth fitted with filters demonstrated to achieve at least 98% capture of paint overspray, (b) the use of high volume, low pressure (HVLP) spray guns, electrostatic application, airless spray guns, or air-assisted airless spray guns or equivalent technology, (c) the cleaning of spray guns with cleaning solvents within a containment system, and (d) ensuring and certifying that all personnel, including contract personnel, who spray apply surface coatings, are trained in the proper spray application of surface coatings and the proper setup and maintenance of spray equipment, would likely meet the TACT requirement.

Plant Site Emission Limits (PSELs)

13. Provided below is a summary of the baseline emissions rate, netting basis, and PSELs for this facility.

Pollutant	Baseline Emission Rate (TPY)	Netting Basis		Plant Site Emission Limit (PSEL)		PSEL Increase Over Netting Basis (TPY)	Significant Emission Rate (TPY)
		Previous (TPY)	Proposed (TPY)	Previous PSEL (TPY)	Proposed PSEL (TPY)		
PM	0	0	0	24	24	24	25
PM ₁₀	0	0	0	14	14	14	15
PM _{2.5}	NA	0	0	9	9	9	10
CO	0	0	0	NA	NA	NA	100
NO _x	0	0	0	NA	NA	NA	40
SO ₂	0	0	0	NA	NA	NA	40
VOC	0	0	0	39	39	39	40
GHG	0	0	0	NA	NA	NA	75,000
Individual HAP	NA	NA	NA	9	9	NA	NA
Aggregate HAPs	NA	NA	NA	24	24	NA	NA

- 13a. The facility does not have a baseline emission rate for pollutants other than PM_{2.5} and GHGs because the facility was not in operation during either the 1977 or 1978 baseline

year. A baseline emission rate is not established for PM_{2.5} in accordance with LRAPA 42-0048(3). The facility has no baseline for GHGs because the facility did not request a baseline for this pollutant.

- 13b. The netting basis for all pollutants is 0 (zero) in accordance with LRAPA 42-0040(3).
- 13c. The PSELS for PM, PM₁₀, PM_{2.5} and VOC are set at the generic PSEL level in accordance with LRAPA 37-0064(3)(b). No PSELS are set for CO, NO_x, SO₂ and GHGs 12 in accordance with LRAPA 42-0020(3)(a) because these pollutants are emitted below the de minimis as defined in LRAPA Title 12. There are no changes to the PSELS as compared to the previous Simple ACDP
- 13d. The baseline year, netting basis, and SER are not applicable for limiting federal HAPs. There are no changes to the PSELS for HAPs as compared to the previous Simple ACDP.

Federal Hazardous Air Pollutants/Toxic Air Contaminants

- 14. The facility currently has PSELS for federal HAPs that limit emissions to no more than 9 tons per year for an individual federal HAP and 24 tons per year for the aggregate of all federal HAP as shown in the table above. Therefore, the facility is considered a minor or area source of federal HAPs.
- 15. Under the Cleaner Air Oregon program, only existing sources that have been notified by LRAPA and new sources are required to perform risk assessments. This source has not been notified by LRAPA and is therefore, not yet required to perform a risk assessment or report annual emissions of toxic air contaminants. LRAPA required reporting of approximately 600 toxic air contaminants in 2016 and regulates approximately 260 toxic air contaminants that have Risk Based Concentrations established in rule. All federal HAPs are on the list of approximately 600 toxic air contaminants. After the source is notified by LRAPA, they must update their inventory and perform a risk assessment to see if they must reduce risk from their toxic air contaminant emissions. Until then, sources will be required to report toxic air contaminant emissions triennially.
- 16. Provided below is a summary of the federal HAP and TAC actual emission estimates based on the 2019 annual report as corrected by LRAPA. The highest individual HAP emission in 2019 was xylenes at 1.65 TPY. The aggregate of all federal HAPs in 2019 was 4.04 TPY. Note that this summary does not include minor amounts of particulate HAPs resulting from welding and/or paint overspray solids. The emission detail sheets attached to this review report conservatively assume 3 shift operation instead of 1 shift to estimate potential emissions from this facility. According to the facility they were operating near maximum capacity in 2019.

Chemical Name (CAS Number)	HAP	TAC	2019 Actual Emissions (lbs/yr)
Acetone (67-64-1)	No	Yes	1,323
t-Butyl Acetate (540-88-5)	No	Yes	183
Butyl Benzyl Phthalate (85-68-7)	No	Yes	183
Ethyl Benzene (100-41-4)	Yes	Yes	886
Methyl isoButyl Ketone (108-10-1)	Yes	Yes	1,005
Methyl Ethyl Ketone (78-93-3)	No	Yes	2,132
Methyl Methacrylate (80-62-6)	No	Yes	18
Tetrachloroethylene (172-18-4)	Yes	Yes	340
Toluene (108-88-3)	Yes	Yes	2,540
Xylenes (1330-20-7)	Yes	Yes	3,303

Chemical Name (CAS Number)	HAP	TAC	2019 Actual Emissions (lbs/yr)
Total Federal HAP =			4.04 TPY

Toxics Release Inventory

17. The Toxics Release Inventory (TRI) is federal program that tracks the management of certain toxic chemicals that may pose a threat to human health and the environment, over which LRAPA has no regulatory authority. It is a resource for learning about toxic chemical releases and pollution prevention activities reported by certain industrial facilities. Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) created the TRI Program. In general, chemicals covered by the TRI Program are those that cause:

- Cancer or other chronic human health effects;
- Significant adverse acute human health effects; or
- Significant adverse environmental effects.

There are currently over 650 chemicals covered by the TRI Program. Facilities that manufacture, process or otherwise use these chemicals in amounts above established levels must submit annual TRI reports on each chemical. NOTE: The TRI Program is a federal program over which LRAPA has no regulatory authority. LRAPA does not guarantee the accuracy of any information copied from EPA's TRI website.

This facility did not report to the TRI during reporting years 2007-2019.

New Source Performance Standards

18. There are no emission units at this facility for which NSPS have been promulgated or are applicable.

National Emission Standards for Hazardous Air Pollutants (NESHAPs)

19. LRAPA reviewed the following NESHAPs to determine their applicability to this facility:

- 19a. 40 CFR Part 63, Subpart MMMM - National Emission Standards for Hazardous Air Pollutants for Surface Coating of miscellaneous Metal Parts and Products is not applicable to the facility because the facility is not a major source of HAPs.
- 19b. 40 CFR Part 63, Subpart PPPP - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products is not applicable to the facility because the facility is not a major source of HAPs.
- 19c. 40 CFR Part 63, Subpart HHHHHH - National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources is not applicable to the facility because the facility does not use methylene chloride for paint stripping, it is not an autobody refinishing operation, and the surface coatings used at the facility do not contain the target HAPs.
- 19d. 40 CFR Part 63, Subpart XXXXXX - National Emission Standards for Hazardous Air Pollutants: Nine Metal Fabrication and Finishing Source Categories is not applicable to the source because the facility does not engage in the operations listed in 40 CFR 63.11514(a).

Recordkeeping Requirements

20. The facility is required to keep and maintain a record of the following information for a period of five (5) years.

- 20a. VOC/HAP-containing materials include, but are not limited to, coatings, lacquers, thinners, stains, topcoats, solvents, adhesives, cleaning, and wash-off materials.

20b. The density and VOC/HAP content information must be supplied from CPDS or SDS provided by the manufacturer/supplier of the VOC/HAP containing material.

Activity	Parameter	Units	Minimum Recording Frequency
VOC/HAP-containing material Usage	Material name and usage	Gallons	Monthly
VOC/HAP-containing material Usage	Density of material	Pounds per gallon	Each coating and solvent
VOC- containing material usage	VOC content	% by weight	Each coating and solvent
HAP- containing material usage	Individual HAP content	% by weight	Each coating and solvent
Welding rod/welding wire usage	Rod/wire type and usage	Pounds	Monthly
Spray booth filter particulate matter control efficiency	Control efficiency	%	Maintain documentation from each filter manufacturer
Spray booth filter replacement	Occurrence	NA	Upon Replacement
Spray booth training	Training logs / certifications	NA	Maintain documentation of training
Complaints from the public	Log each complaint and the resolution	NA	Upon receipt
Upset log of all planned and unplanned excess emissions	See G15	NA	Per occurrence

Reporting Requirements

21. For each year the permit is in effect, the permittee must submit to LRAPA by February 15th, the following information from the previous calendar year:
 - 21a. An annual summary of the total gallons of VOC and HAP-containing materials used;
 - 21b. Calculations of annual VOC and HAP emissions determined each month to demonstrate compliance with VOC and HAP PSEL. The summary must include VOC and HAP emission calculations corresponding to each 12-month rolling period in the previous calendar year;
 - 21c. A list of permanent changes made in facility processes, production levels, and pollution control equipment including any new SDS or CPDS;
 - 21d. A summary of maintenance performed on pollution control equipment;
 - 21e. A summary of complaints related to air quality received by the permittee during the previous calendar year and their resolution; and
 - 21f. A summary of any upsets that resulted in planned and unplanned excess emissions.

22. The permittee is not subject to greenhouse gas reporting under OAR 340 Division 215 because actual greenhouse gas emissions are less than 2,500 metric tons (2,756 short tons) of CO₂ equivalents per year. If the source ever emits more than this amount, they will be required to report greenhouse gas emissions.

A&K Development Company
Permit Number: 200042
Expiration Date: January 11, 2026

Page 7 of 9

Public Notice

23. The draft permit was on public notice from December 10, 2020 to January 8, 2021. No written comments were submitted during the 30-day comment period.

JJW/cmw
01/11/2021

A&K Development - 200042

Emission Detail Sheets

Coating Operations

VOC and PM Emissions

Product	2019 Usage (gal/yr)	Max Usage (gal/yr)	Product Density (lb/gal)	VOC Content (%)	VOC Emissions (lbs/yr)	PM Content (%)	PM Usage (lbs)	PM Emissions Before Control (lbs/yr)	PM Emissions After Control (lbs/yr)
Chemlok 205	200	600	7.73	76.65%	3,555	23.35%	1,083	650	8.66
Chemlok 213	315	945	7.41	78.43%	5,492	21.57%	1,510	906	12.08
Chemlok 220	190	570	8.94	75.21%	3,833	24.79%	1,263	758	10.11
Chemlok 248	290	870	7.31	99.90%	6,353	0.10%	6	4	5.1E-02
Acetone	190	570	7.33	0.00%	0	0.00%	0	0	0
Forrest Paint Toluene	290	870	7.25	100%	6,308	0.00%	0	0	0
Forrest Paint Xylene	5	15	7.62	100%	114	0.00%	0	0	0
14e Paint	15	45	8.30	56.34%	210	43.66%	163	98	1.30
16p Primer	241	723	8.84	52.63%	3,364	47.37%	3,028	1,817	24.22
64e Paint	228	684	8.03	61.38%	3,371	38.62%	2,121	1,273	16.97
				Total lbs/yr	32,600		Total lbs/yr	5,505	73.40
				Total TPY	16.30		Total TPY	2.75	3.7E-02

Notes:

Max usage conservatively assumes 3 shift operation instead of 1 shift

Assumed transfer efficiency for HVLP: 60%

Required dry filter control efficiency: 98%

HAP/TAC Emissions

Product	Acetone (67-64-1)		t-Butyl Acetate (540-88-5)		Butyl Benzyl Phthalate (85-68-7)		Cumene (98-82-8)		Ethyl Benzene (100-41-4)		Methyl isoButyl Ketone (108-10-1)		Methyl Ethyl Ketone (78-93-3)		Methyl Methacrylate (80-62-6)		Tetrachloroethylene (127-18-4)		Toluene (108-88-3)		Xylenes (1330-20-7)	
	% by wt.	lb	% by wt.	lb	% by wt.	lb	% by wt.	lb	% by wt.	lb	% by wt.	lb	% by wt.	lb	% by wt.	lb	% by wt.	lb	% by wt.	lb	% by wt.	lb
Chemlok 205		0		0		0		0		0	65.0%	3,015		0		0		0	0.9%	41.7	15.0%	696
Chemlok 213		0		0		0		0	5.0%	350		0	55.0%	3,851		0		0		0	15.0%	1,050
Chemlok 220		0		0		0		0	15.0%	764		0		0	20.0%	1,019		0	0.9%	45.9	50.0%	2,548
Chemlok 248		0		0		0		0	5.0%	318		0	40.0%	2,544		0		0		0	20.0%	1,272
Acetone	100.0%	4,178		0		0		0		0		0		0		0		0		0		0
Forrest Paint Toluene		0		0		0		0		0		0		0		0		0	100.0%	6,308		0
Forrest Paint Xylene		0		0		0	1.0%	1.14	25.0%	28.6		0		0		0		0	1.0%	1.14	95.0%	109
14e Paint		0		0		0		0	10.0%	37.4		0		0		0		0	10.0%	37.4	45.0%	168
16p Primer		0		0		0		0	10.0%	639		0		0		0		0	10.0%	639	35.0%	2,237
64e Paint		0	10.0%	549	10.0%	549		0	10.0%	549		0		0	1.0%	54.9		0	10.0%	549	35.0%	1,922
	HAP = N		HAP = N		HAP = N		HAP = Y		HAP = Y		HAP = Y		HAP = N		HAP = N		HAP = Y		HAP = Y		HAP = Y	
	TAC = Y		TAC = Y		TAC = Y		TAC = Y		TAC = Y		TAC = Y		TAC = Y		TAC = Y		TAC = Y		TAC = Y		TAC = Y	
	Total lbs/yr	4,178	Total lbs/yr	549	Total lbs/yr	549	Total lbs/yr	1.14	Total lbs/yr	2,687	Total lbs/yr	3,015	Total lbs/yr	6,395	Total lbs/yr	54.9	Total lbs/yr	1,019	Total lbs/yr	7,622	Total lbs/yr	10,002
	Total TPY	2.09	Total TPY	0.27	Total TPY	0.27	Total TPY	5.7E-04	Total TPY	1.34	Total TPY	1.51	Total TPY	3.20	Total TPY	2.7E-02	Total TPY	0.51	Total TPY	3.81	Total TPY	5.00
Total Federal HAPs =	12.2 TPY																					

A&K Development - 200042

Emission Detail Sheets

Welding Operations

Welding Wire/Rod	2019 Usage	Unit	Max Usage	Unit
E308L (wire)	775	lbs/yr	2325	lbs/yr
ER309 (wire)	1800	lbs/yr	5400	lbs/yr
ER70S (wire)	3872	lbs/yr	11616	lbs/yr
E71T (wire)	297	lbs/yr	891	lbs/yr
E70S (rod)	10	lbs/yr	30	lbs/yr

Welding Emissions

Welding Wire/Rod	PM		PM10		PM2.5		Cr		Co		Mn		Ni		Pb	
	lb/yr	TPY	lb/yr	TPY	lb/yr	TPY	lb/yr	TPY	lb/yr	TPY	lb/yr	TPY	lb/yr	TPY	lb/yr	TPY
E308L (wire)	1.3E+01	6.3E-03	1.3E+01	6.3E-03	1.3E+01	6.3E-03	1.2E+00	6.1E-04	2.3E-03	1.2E-06	8.0E-01	4.0E-04	4.3E-01	2.1E-04	0.0E+00	0.0E+00
ER309 (wire)	9.5E+01	4.8E-02	9.0E+01	4.5E-02	8.3E+01	4.2E-02	5.4E-02	2.7E-05	--	--	4.9E-01	2.4E-04	5.4E-02	2.7E-05	5.4E-02	2.7E-05
ER70S (wire)	6.0E+01	3.0E-02	6.0E+01	3.0E-02	6.0E+01	3.0E-02	1.2E-02	5.8E-06	1.2E-02	5.8E-06	3.7E+00	1.8E-03	1.2E-02	5.8E-06	0.0E+00	0.0E+00
E71T (wire)	1.1E+01	5.4E-03	1.1E+01	5.4E-03	1.1E+01	5.4E-03	1.8E-03	8.9E-07	8.9E-04	4.5E-07	5.9E-01	2.9E-04	3.6E-03	1.8E-06	0.0E+00	0.0E+00
E70S (rod)	1.6E-01	7.8E-05	1.6E-01	7.8E-05	1.6E-01	7.8E-05	3.0E-05	1.5E-08	3.0E-05	1.5E-08	9.5E-03	4.8E-06	3.0E-05	1.5E-08	0.0E+00	0.0E+00
Total =	1.8E+02	9.0E-02	1.7E+02	8.7E-02	1.7E+02	8.4E-02	1.3E+00	6.4E-04	1.5E-02	7.4E-06	5.6E+00	2.8E-03	5.0E-01	2.5E-04	5.4E-02	2.7E-05

Welding Emission Factors

Welding Wire/Rod	PM	PM10	PM2.5	Cr	Co	Mn	Ni	Pb
E308L (wire)	5.4	5.4	5.4	5.24	0.01	3.46	1.84	0
ER309 (wire)	17.62	16.65	15.43	0.1	--	0.9	0.1	0.1
ER70S (wire)	5.2	5.2	5.2	0.01	0.01	3.18	0.01	0
E71T (wire)	12.2	12.2	12.2	0.02	0.01	6.62	0.04	0
E70S (rod)	5.2	5.2	5.2	0.01	0.01	3.18	0.01	0

Notes:

Max usage conservatively assumes 3 shift operation instead of 1 shift
 Except for ER309, all emission factors are from US EPA AP-42 Ch. 12.19
 The emission factors for ER309 are from "Shipyard Welding Emission Factor Development" by Mener, Rosen, Austin and Holt
 Units for PM/PM10/PM2.5 are lb/1000 lb of electrode consumed
 Units for metal HAPs are 10^-1 lb/1000 lb of electrode consumed