



DEPARTMENT OF NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION

PERMIT TO CONSTRUCT

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the air contaminant source(s) described below, in accordance with the laws, rules and conditions as set forth herein.

Permit Number:

07 2 0 1 1 - 0 1 1

Project Number: 2010-10-012

Installation Number: 225-0045

Parent Company:

THI

Parent Company Address: 1901 East Ellsworth, Ann Arbor, MI 48108

Installation Name:

Undercover, Inc.

Installation Address:

59 Absolute Drive, Rogersville, MO 65742

Location Information:

Webster County (S21, T28N, R19W)

Application for Authority to Construct was made for:

The installation of six coatings booths, one cleaning booth, one sanding booth and 11 natural gas ovens. This review was conducted in accordance with Section (6), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.



Standard Conditions (on reverse) are applicable to this permit.



Standard Conditions (on reverse) and Special Conditions are applicable to this permit.

JUL 22 2011

EFFECTIVE DATE

James Kwanan
 DIRECTOR OR DESIGNEE
 DEPARTMENT OF NATURAL RESOURCES

STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review. In the event that there is a discrepancy between the permit application and this permit, the conditions of this permit shall take precedence. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Departments' Air Pollution Control Program of the anticipated date of start up of these air contaminant sources. The information must be made available within 30 days of actual startup. Also, you must notify the Department of Natural Resources Regional office responsible for the area within which you are located within 15 days after the actual start up of these air contaminant sources.

A copy of this permit and permit review shall be kept at the installation address and shall be made available to Department of Natural Resources' personnel upon request.

You may appeal this permit or any of the listed special conditions to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you choose not to appeal, this certificate, the project review and your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant sources(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit at (573) 751-4817. If you prefer to write, please address your correspondence to the Missouri Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention: Construction Permit Unit.

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Project No.	2010-10-012

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

The special conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (12)(A)10. "Conditions required by permitting authority."

Undercover, Inc.
Webster County (S21, T28N, R19W)

1. Emission Limitation
 - A. Undercover, Inc. shall emit less than 250.0 tons of Volatile Organic Compounds (VOCs) in any consecutive 12-month period from the entire installation. See Table 1 below for equipment at the installation that emit VOCs.
 - B. Undercover, Inc. shall emit less than 10.0 tons individually or 25.0 tons combined of Hazardous Air Pollutants (HAPs) in any consecutive 12-month period from the entire installation. See Table 1 for equipment at the installation that emit HAPs.

Table 1: Installation Equipment that Emit VOCs and HAPs

Emission Points	Emission Point Description
EP-01	11 natural gas ovens
EP-02	Parts cleaning
EP-03	Six coatings booths and one cleaning booth
EP-04	Gun/Line Cleaning
EP-05	Glue Application

- C. Attachment A, Attachment B and Attachment C, or equivalent forms, such as electronic forms, approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Conditions 1.A and 1.B.
2. Control Device Requirement for the Spray Guns and Sander
 - A. Undercover, Inc. shall control emissions from coatings spray guns and the sander using booths equipped with filters as specified in the permit application.
 - B. The coatings booths, the sanding booth and the filters shall be operated and maintained in accordance with the manufacturer's specifications.
 - C. Visible Emissions shall be used as an indicator of the proper operation of

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SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

the filters. During proper operations, no visible emissions are expected from exhausts of the filters and from the booths. The existence of visible emissions from the exhausts and booths indicates a decrease in efficiency or malfunctioning of the filters. Observations shall be made using U.S. EPA Method 22 trained observer and U.S. EPA Method 22-like procedures and shall be done in accordance with the following.

- 1) Visible emissions from the exhaust and the booths shall be monitored on a daily basis when the process (spray gun or sander) is in operation.
- 2) The observation shall be for a two (2) minute time period.
- 3) The condition of no visible emissions is considered normal for the operation of the filters. When visible emissions are noted from the exhausts, corrective action shall be taken.

D. Replacement filters shall be kept on hand at all times. The filters shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).

E. Undercover, Inc. shall maintain an operating and maintenance log for the filters which shall include the following:

- 1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions
- 2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.; and
- 3) The time and date of each visible emissions observation required in Special Condition 2.C., the results of each observation (i.e. whether visible emissions are observed), and the type of corrective action taken, if necessary.

3. Use of Alternative Coatings, Cleaners and Glue

A. When considering using alternative coatings, cleaners and/or glue that are different from materials listed in the Application for Authority to Construct, Undercover, Inc. shall calculate the potential emissions of each individual HAP in all coatings, cleaners and glues, for any individual HAP with a Screening Model Action Level (SMAL) less than 10.0 tons per year.

B. For any alternative coatings, cleaners and glue with individual HAP with SMAL less than 10.0 tons per year, Undercover, Inc. shall seek approval from the Air Pollution Control Program before use of the alternative material If the potential individual HAP emissions for the installation is equal to or greater than the SMAL.

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SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

- C. Attachment D or an equivalent form shall be used to show compliance with Special Conditions 3.A and 3.B.

- 4. **Operational Requirement**
Undercover, Inc. shall keep all chemicals (i.e. coatings, cleaners, glue, etc.) it uses in sealed containers whenever the materials are not in use. Undercover, Inc. shall provide and maintain suitable, easily read, permanent markings on all chemical containers used at the installation.

- 5. **Record Keeping and Reporting Requirements**
 - A. Undercover, Inc. shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request. These records shall include Material Safety Data Sheets (MSDS) for all materials used.

 - B. Undercover, Inc. shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the end of the month during which any record required by this permit show an exceedance of a limitation imposed by this permit.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (6) REVIEW

Project Number: 2010-10-012
Installation ID Number: 225-0045
Permit Number:

Undercover, Inc.
59 Absolute Drive
Rogersville, MO 65742

Complete: November 16, 2010

Parent Company:
THI
1901 East Ellsworth
Ann Arbor, MI 48108

Webster County (S21, T28N, R19W)

REVIEW SUMMARY

- Undercover, Inc. has applied for authority to construct six coatings booths, a cleaning booth, a sanding booth and 11 natural gas ovens.
- Hazardous Air Pollutant (HAP) emissions are expected from the proposed equipment. HAPs of concern from this process are Ethylbenzene, Xylene, Toluene, Methanol and Methyl Isobutyl Ketone.
- None of the New Source Performance Standards (NSPS) apply to the installation. 40 CFR Part 60, *Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations*, of the NSPS does not apply to the coatings booths because they are not located at a light-duty truck assembly plant.
- None of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) apply to this installation.
- None of the currently promulgated Maximum Achievable Control Technology (MACT) regulations apply to the proposed equipment.
- 40 CFR Part 63, Subpart IIII, *National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks*, and Subpart PPPP, *National Emissions Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products*, of the MACT do not apply to this facility because this facility is not a major source for HAPs. It has accepted the limits of 10.0 tons per year of individual HAP and 25.0 tons per year of combined HAPs to keep from becoming a major source. There are conditions other than major source status that may exempt the facility from these subparts. If the facility ever asks for the removal of these HAPs limits, a determination regarding the applicability of these subparts should be made at that time.

- 40 CFR Part 63, Subpart HHHHHH, *National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources*, of the MACT does not apply to this facility because the installation is not an autobody refinishing operation with spray-applied surface coating operations or a spray-applied surface coatings operation that uses coatings containing chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni) or cadmium (Cd). If the facility ever switches to a coating containing these HAPs, then subpart HHHHHH would apply.
- Booths and filters are being used to control the PM_{2.5} and PM₁₀ emissions from the spray guns and sanders in this permit.
- This review was conducted in accordance with Section (6) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Conditioned potential emissions of VOCs are above the de minimis level.
- This installation is located in Webster County, an attainment area for all criteria pollutants.
- This installation is not on the List of Named Installations found in 10 CSR 10-6.020(3)(B), Table 2. The installation's major source level is 250 tons per year and fugitive emissions are not counted toward major source applicability.
- Ambient air quality modeling was not performed for this review. No model is currently available which can accurately predict ambient ozone concentrations caused by this installation's VOC emissions.
- Emissions testing is not required for the equipment.
- The facility shall either apply for an Intermediate Operating Permit within 90 days of equipment startup or for a Part 70 Operating Permit within one year of equipment startup.
- Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

Undercover, Inc. manufactures Acrylonitrile Butadiene Styrene (ABS) plastic bed covers for pickup trucks. The ABS is thermo-formed, sanded and cleaned before being assembled into truck beds for shipping. The facility is located in Webster County (S21, T28N, R19W) and currently does not have either a construction permit or an operating permit. After this project, the facility will be a minor source for construction permits and should either apply for an Intermediate Operating Permit within 90 days of equipment startup or a Part 70 Operating Permit within one year of equipment startup.

PROJECT DESCRIPTION

Undercover, Inc. will install six coatings booths, one final cleaning booth, a sanding booth and 11 natural gas ovens. The six coatings booths include one sealer booth, three base coat (color) booths and two clear coat booths. The coatings will be manually sprayed on with high volume low pressure (HVLP) guns. The spray booths will be a full four-sided design with pneumatically operated doors to let the product in and out. While the doors are open, an air curtain will be in operation to provide complete booth isolation. The booth is a full down-draft booth where the air will be extracted through the floor. Fabric filters will be used to control PM_{2.5} and PM₁₀ emissions. The manual sander is used to scuff the covers prior to painting them and will be equipped with a booth and filter to control particulate emissions.

The facility is expected to paint covers of various sizes. The largest size cover (48 square feet) uses 15 ounces of sealer, 36 ounces of base color and 45 ounces of clear coat. For an eight hour shift, a maximum of 200 covers will be coated, using a maximum of 23.4 gallons of sealer, 56.24 gallons of base and 70.32 gallons of clear coat. The 11 natural gas ovens have a combined design rate of 17 MMbtu/hr.

EMISSIONS/CONTROLS EVALUATION

VOC and HAPs emissions from the coatings were calculated by multiplying the maximum coatings usage by the VOC or HAPs content given in the Material Safety Data Sheets (MSDS) and assuming that all (100%) of the VOC and HAPs are emitted. Total particulate emissions were calculated assuming a 50% transfer efficiency. PM₁₀ emissions were calculated assuming that 80% of total particulate emissions are less than ten microns in diameter and PM_{2.5} emissions were calculated assuming that 30% of total particulate emissions are less than 2.5 microns in diameter. The particle sized distributions were taken from the paper *Size Distribution of Chromate Paint Aerosol Generated in a Bench-Scale Spray Booth*, published by in the *Annals of Occupational Hygiene* in 2005.

Particulate emissions from the spray guns are controlled by booths and filters. The filters are given a control efficiency of 99.0% for both PM_{2.5} and PM₁₀. This is the default value used by the Air Pollution Control Program. A capture efficiency of 100% was used for the booths because they are four sided enclosures (with roofs) that use air curtains to provide booth isolation when the doors are opened. Combustion emissions from the natural gas ovens were calculated by using emission factors found in The Environmental Protection Agency (EPA) document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, Chapter 1.4, *Natural Gas Combustion* (7/98). Currently, there are no emission factors for plastic sanding (scuffing), and the PM emission factor for hardboard sanding (3-07-014-80) is used to estimate emissions from the sanding booth. Due to lack of data on particle size distribution, it was assumed that all of the PM are PM_{2.5} and PM₁₀. This emission factor is based on the use of a fabric filter. Therefore, no control device efficiency was assumed for the filter. The sand booth uses a similar air makeup system as the paint booth so a 100% capture efficiency was assumed.

Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8760 hours per year.) The facility will be using a variety of paints and coatings and were not able to provide the MSDS for all the coatings it may use. Potential emissions of the project were calculated based on the MSDS that the company was able to provide. The installation was given a 250.0 ton per year VOC limit and a 10.0/25.0 ton per year HAPs limit, which should alleviate any concern that using other coatings may increase the VOC and HAPs limit above major levels.

If the facility decides to use alternative coatings, cleaners and/or glues, it shall calculate the individual HAPs emission from all materials used at the installation, for any HAPs with Screening Model Action Level less than 10.0 tons per year. If the individual HAP emissions for all of the coatings, cleaners and glue are greater than its SMAL, the installation shall seek approval from the Air Pollution Control Program before using these alternative materials. A list of the SMAL for each HAP is given in Appendix A. This list is current as of the date of permit issuance. For an updated list of the SMAL, please contact the Air Pollution Control Program.

The existing potential emissions were calculated as part of this permit review. The only existing emissions came from the use of less than one gallon of glue per day, which contains both VOC and HAPs. None of the other equipment, including three thermoforming machines and various assembly stations, is considered emission units.

The following table provides an emissions summary for this project.

Table 1: Emissions Summary (tons per year)

Pollutant	Regulatory De Minimis/SMAL Levels	Existing Potential Emissions	Existing Actual Emissions (EIQ)	Potential Emissions of the Application	New Installation Conditioned Potential
PM _{2.5}	10.0	N/A	N/D	1.23	N/A
PM ₁₀	15.0	N/A	N/D	2.10	N/A
SO _x	40.0	N/A	N/D	0.04	N/A
NO _x	40.0	N/A	N/D	7.3	N/A
VOC	40.0	0.75	N/D	323.50	<250.0
CO	100.0	N/A	N/D	6.13	N/A
HAPs	10.0/25.0	0.36	N/D	102.81	<10.0/25.0
Ethylbenzene	10.0	N/A	N/D	17.0	<10.0
Xylene	10.0	N/A	N/D	68.03	<10.0
Toluene	10.0	0.25	N/D	11.27	<10.0
1,6-Hexamethylene Diisocyanate	10	N/A	N/D	0.30	N/A
Methyl Isobutyl Ketone	10	N/A	N/D	2.46	N/A
Cumene	10	N/A	N/D	0.04	N/A

N/A = Not Applicable; N/D = Not Determined

PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (6) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Conditioned potential emissions of VOC are above the *de minimis* level.

APPLICABLE REQUIREMENTS

Undercover, Inc. shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards, based on information submitted in the application, has been verified at the time this application was approved. For a complete list of applicable requirements for your installation, please consult your operating permit.

GENERAL REQUIREMENTS

- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110
The emission fee is the amount established by the Missouri Air Conservation Commission annually under Missouri Air Law 643.079(1). Submission of an Emissions Inventory Questionnaire (EIQ) is required April 1, if submitting by hardcopy, or May 1, if submitting online at <https://www.dnr.mo.gov/moeis/main/login>, for the previous year's emissions. Payments are due June 1.
- *Operating Permits*, 10 CSR 10-6.065
- *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*, 10 CSR 10-6.170
- *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.220
- *Restriction of Emission of Odors*, 10 CSR 10-6.165

STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (6), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, I recommend this permit be granted with special conditions.

Chia-Wei Young
Environmental Engineer

Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated October 1, 2010, received October 4, 2010, designating Undercover, Inc. as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.
- Southwest Regional Office Site Survey, dated November 19, 2010.

Attachment A – VOC Compliance Worksheet

Undercover, Inc.
 Webster County (S21, T28N, R19W)
 Project Number: 2010-10-012
 Installation ID Number: 225-0045
 Permit Number: _____

This sheet covers the month of _____ in the year _____

Copy this sheet as needed.

From Coatings/Cleaners Usage				
Coatings/Cleaners/Glues Used	Amount of Material Used (gal)	Density (lbs/gal)	VOC Content (Weight %)	¹ VOC Emissions (Tons)
² Total VOC Emissions from Coatings/Cleaners/Glues (tons) =				

From Natural Gas Combustion			
Other VOC Sources	Fuel Usage (mmscf)	Emission Factors (lbs/mmscf)	³ VOC Emissions (tons)
Natural Gas Combustion		5.5	

⁴ Total VOC Emissions Calculated for this Month (tons) =	
⁵ Total VOC Emissions from the Previous Eleven Months (tons) =	
⁶ Total VOC Emissions for the Current 12-Month Period (tons) =	

Note 1: VOC Emissions from each coatings/cleaner/glue calculated by using [Amount of Material Used (gal) x Density (lbs/gal) x (VOC Content (%)/100) ÷ 2,000(lbs/ton)]

Note 2: Total VOC Emissions from Coatings/Cleaners/Glues (tons) calculated by adding the VOC Emissions (tons) from each coating and cleaner.

Note 3: VOC Emissions from Natural Gas Combustion (tons) calculated from [Fuel Usage (mmscf) x Emission Factor (lbs/mmscf) ÷ 2,000 (lbs/ton)]

Note 4: Total VOC Emissions Calculated for this Month (tons) calculated from adding the Total VOC Emissions from Coatings/Cleaners/Glues (tons) and the VOC Emissions (tons) from the combustion of natural gas.

Note 5: Total VOC Emissions from the Previous Eleven Months (tons) calculated by adding the Total VOC Emissions Calculated for this Month (tons) of the previous eleven Attachment A's.

Note 6: Total VOC Emissions for the Current 12-Month Period (tons) calculated by adding the Total VOC Emissions Calculated for this Month (tons) and the Total VOC Emissions from the Previous Eleven Months (tons).

A Total of **250.0 tons per year** of VOC indicates compliance

Attachment B – Combined HAP Compliance Worksheet

Undercover, Inc.
 Webster County (S21, T28N, R19W)
 Project Number: 2010-10-012
 Installation ID Number: 225-0045
 Permit Number: _____

This sheet covers the month of _____ in the year _____

Copy this sheet as needed.

From Coatings/Cleaners Usage				
Coatings/Cleaners/Glues Used	Amount of Material Used (gal)	Density (lbs/gal)	HAP Content (Weight %)	¹ HAP Emissions (Tons)
² Total Combined HAP Emissions from Coatings/Cleaners/Glues (tons) =				

From Natural Gas Combustion			
Other HAP Sources	Fuel Usage (mmscf)	Emission Factors (lbs/mmscf)	³ HAP Emissions (tons)
Natural Gas Combustion		1.89	

⁴ Total Combined HAP Emissions Calculated for this Month (tons) =	
⁵ Total Combined HAP Emissions from the Previous Eleven Months (tons) =	
⁶ Total Combined HAP Emissions for the Current 12-Month Period (tons) =	

Note 1: HAP Emissions from each coatings/cleaner/glues calculated by using [Amount of Material Used (gal) x Density (lbs/gal) x (HAP Content (%)/100) ÷ 2,000(lbs/ton)]
 Note 2: Total Combined HAP Emissions from Coating/ Cleaner/Glues (tons) calculated by adding the HAP Emissions (tons) from each coating and cleaner.
 Note 3: HAP Emissions from Natural Gas Combustion (tons) calculated from [Fuel Usage (mmscf) x Emission Factor (lbs/mmscf) ÷ 2,000 (lbs/ton)]
 Note 4: Total Combined HAP Emissions Calculated for this Month (tons) calculated from adding the Total Combined HAP Emissions from Coatings/Cleaners (tons)/Glues (tons) and the HAP Emissions (tons) from the combustion of natural gas.
 Note 5: Total Combined HAP Emissions from the Previous Eleven Months (tons) calculated by adding the Total HAP Emissions Calculated for this Month (tons) of the previous eleven Attachment A's.
 Note 6: Total Combined HAP Emissions for the Current 12-Month Period (tons) calculated by adding the Total Combined HAP Emissions Calculated for this Month (tons) and the Total Combined HAP Emissions from the Previous Eleven Months (tons).

A Total of **25.0 tons per year** indicates compliance

Appendix A
Hazardous Air Pollutant (HAP) Screening Model Action Levels (SMAL)

Chemical	CAS#	Emission Threshold Levels (tons/year)	Synonyms
Acetaldehyde	75-07-0	9	Acetic Aldehyde, Aldehyde, Ethanal, Ethyl Aldehyde
Acetamide	60-35-5	1	Acetic Acid Amide, Ethanamide
Acetonitrile	75-05-8	4	Methyl Cyanide, Ethanenitrile, Cyanomethane
Acetophenone	98-86-2	1	Acetylbenzene, Methyl Phenyl Ketone, Hypnone
Acetylaminofluorene, [2-]	53-96-3	0.005	N-2-Fluorenyl Acetamide, N-Fluorene-2-yl Acetamide, 2-Acetamideofluorene
Acrolein	107-02-8	0.04	Acrylaldehyde, Acrylic Aldehyde, Allyl Aldehyde, Propenal
Acrylamide	79-06-1	0.02	Propenamide, Acrylic Amide, Acrylamide Monomer, Ethylenecarboxamide
Acrylic Acid	79-10-7	0.6	Propenoic Acid, Ethylene Carboxylic Acid, Vinylformic Acid
Acrylonitrile	107-13-1	0.3	Vinyl Cyanide, Cyanoethylene, Propenenitrile
Allyl Chloride	107-05-1	1	1-Chloro-2-Propene, 3-Chloropropylene, Chloroallylene, Alpha-Propylene
Aminobiphenyl, [4-]	92-67-1	1	Biphenylene, P -Phenylaniline, Xenylamine, 4-Aminodiphenyl, 4-Biphenylamine
Aniline	62-53-3	1	Aminobenzene, Phenylamine, Aniline Oil, Aminophen, Arylamine
Anisidine, [Ortho-]	90-04-0	1	O-Methoxyaniline
Anthracene	120-12-7	0.01	Anthracin, Green Oil, Paranaphthalene, Tetraolive N2G
Antimony Compounds (Notes 2, 4)		5	Elemental Antimony (CAS 7440-36-0), Antimony (Pentachloride, Tribromide, Trichloride, Trifluoride)
Antimony Pentafluoride	7783-70-2	0.1	
Antimony Potassium Tartrate	28300-74-5	1	
Antimony Trioxide	1309-64-4	1	
Antimony Trisulfide	1345-04-6	0.1	
Arsenic Compounds (Notes 2, 4)		0.005	Arsenic (Diethyl, Disulfide, Pentoxide, Trichloride, Trioxide, Trisulfide), Arsinine, Elemental Arsenic (CAS 7440-38-2)
Asbestos	1332-21-4	0	Chrysotile, Amosite, Crocidolite, Tremolite, Anthophyllite, Actinolite
Benz(a)Anthracene	56-55-3	0.01	Benzanthrene, Benzo(a)anthracene, Benzphenanthrene, Naphthanthracene
Benzene	71-43-2	2	Benzol, Phenyl Hydride, Coal Naphtha, Phene, Benzole, Cyclohexatriene

Benzidine	92-87-5	0.0003	4,4'-Biphenyldiamine, P-Diaminodiphenyl, 4,4'-Diaminobiphenyl, Benzidine Base
Benzo(a)pyrene	50-32-8	0.01	3,4-Benzopyrene
Benzo(b)fluoranthene	205-992	0.01	
Benzo(k)fluoranthene	107-08-9	0.01	
Benzotrichloride	98-07-7	0.006	Benzoic Trichloride, Phenylchloroform, Trichloromethylbenzene
Benzyl Chloride	100-44-7	0.1	Alpha-Chlorotoluene, Toly Chloride
Beryllium Compounds (Notes 2, 4)		0.008	Elemental Beryllium (CAS 7440-41-7), Glucinum
Beryllium Salts		0.00002	
Biphenyl, [1, 1-]	92-52-4	10	Diphenyl, Phenylbenzene
Bis(Chloroethyl)Ether	111-44-4	0.06	Dichloroethyl ether, Dichloroether, Dichloroethyl Oxide, BCEE
Bis(Chloromethyl)Ether	542-88-1	0.0003	BCME, Sym-Dichloromethyl ether, Dichloromethyl Ether, Oxybis-(Chloromethane)
Bromoform	75-25-2	10	Tribromomethane, Methyl Tribromide
Bromomethane	74-83-9	10	Methyl Bromide
Butadiene, [1,3-]	106-99-0	0.07	Biethylene, Biviny, Butadiene Monomer, Divinyl Erythrene, Vinylethylene
Butoxyethanol Acetate [2-]	112-07-2	5	2-Butoxyethyl Acetate, Butyl Cellosolve Acetate, Butyl Glycol Acetate
Butylene Oxide, [1,2-]	106-88-7	1	1,2-Epoxybutane, 1-Butene Oxide, 1,2-Butene Oxide
Cadmium Compounds (Notes 2, 4)		0.01	Cadmium (Dust, Fume, Acetate, Chlorate, Chloride, Fluoride, Oxide, Sulfate, Sulfide), Elemental Cadmium (CAS 7440-43-9)
Calcium Cyanamide	156-62-7	10	Nitrolime, Calcium Carbimide, Cyanamide
Caprolactam (Delisted)	105-60-2		Hexahydro-2H-Azepin-2-One, Aminocaproic Lactam, Epsilon-Caprolactam
Captan	133-06-2	10	N-Trichloromethylmercapto-4-Cyclohexene-1,2-Dicarboximide
Carbaryl	63-25-2	10	1-Naphthyl-N-Methylcarbamate
Carbon Disulfide	75-15-0	1	Carbon Bisulfide, Dithiocarbonic Anhydride
Carbon Tetrachloride	56-23-5	1	Tetrachloromethane, Perchloromethane
Carbonyl Sulfide	463-58-1	5	Carbon Oxide Sulfide, Carbonoxysulfide
Catechol	120-80-9	5	Pyrocatechol, O-Dihydroxybenzene
Chloramben	133-90-4	1	3-Amino-2,5-Dichlorobenzoic Acid, Amben, Amiben*, Vegiben* (*Trademark)
Chlordane	57-74-9	0.01	ENT9932, Octachlor
Chlorine	7782-50-5	0.1	Bertholite
Chloroacetic Acid	79-11-8	0.1	Monochloroacetic Acid, Chloroethanoic Acid
Chloroacetophenone, [2-]	532-27-4	0.06	Phenacyl Chloride, Chloromethyl Phenyl Ketone, Tear Gas, Mace
Chlorobenzene	108-90-7	10	Benzene Chloride, Monochlorobenzene, Chlorobenzol, Phenyl Chloride, MCB
Chlorobenzilate	510-15-6	0.4	Ethyl-4,4'-Dichlorobenzilate, Ethyl-4,4'Dichlorophenyl Glycollate

Chloroform	67-66-3	0.9	Trichloromethane
Chloromethyl Methyl Ether	107-30-2	0.1	CMME, Methyl Chloromethyl Ether, Chloromethoxymethane, Monochloromethyl Ether
Chloroprene	126-99-8	1	2-Chloro-1,3-Butadiene, Chlorobutadiene, Neoprene Rubber Compound
Chromium (VI) Compounds (Notes 4, 10)		0.002	Chromate (VI) [Lead, Eilithium, Trioxide, Phosphate, Potassium, Zinc], Chromic Acid (CAS 7738-94-5), Calcium Chromate (CAS 13765-19-0)
Chromium Compounds (Notes 4, 10)		5	Elemental Chromium (CAS 7440-47-3), Chromium (II) Compounds, Chromium (III) Compounds [Acetate, Bromide, Fluoride, Nitrate, Oxide, Sulfate], Chromic Chloride)(CAS 10025-73-7)
Chrysene	218-01-9	0.01	
Cobalt Compounds (Notes 2,4)	12010-68-1	0.1	Cobalt (Bromide, Carboyl, Chloride, Diacetate, Formate, Nitrate, Oxide, Sulfamate) Elemental Cobalt (CAS 7440-48-4)
Coke Oven Emissions	8007-45-2	0.03	Coal Tar, Coal Tar Pitch, Coal Tar Distillate
Cresol, [Meta-]	108-39-4	1	3-Cresol, M-Cresylic Acid, 1-Hydroxy-3-Methylbenzene, M-Hydroxytoluene
Cresol, [Ortho-]	95-48-7	1	2-Cresol, O-Cresylic Acid, 1-Hydroxy-2-Methylbenzene, 2-Methylphenol
Cresol, [Para-]	106-44-5	1	4-Cresol, P-Cresylic Acid, 1-Hydroxy-4-Methylbenzene, 4-Hydroxytoluene
Cresols (Mixed Isomers)	1319-77-3	1	Cresylic Acid
Cumene	98-82-8	10	Isopropyl Benzene, 2-Phenylpropane
Cyanide Compounds (Notes 7)	20-09-7	0.1	Hydrogen Cyanide (CAS 74-90-8), Potassium Cyanide (CAS 151-50-8), Sodium Cyanide (CAS 143-33-9), Copper Cyanide (CAS 544-92-3), Cupricin, Cuprous Cyanide, Chlorine Cyanide (CAS 506-77-4), Cyanogen Chloride, Chlorocyanogen, Chlorcyan, Barium Cyanide (CAS 542-62-1), Cyanogen (CAS 460-19-5), Cyanogen Bromide (CAS 506-68-3), Potassium Silver Cyanide (CAS 506-61-6), Silver Cyanide (CAS 506-64-9), Zinc Cyanide (CAS 557-21-1), and other cyanide salts
DDE (p,p'-Dichlorodiphenyl Dichloroethylene	72-55-9	0.01	Dichlorodiphenyldichloroethylene
Di(2-Ethylhexyl)Phthalate, (DEHP)	117-81-7	5	Bis(2-ethylhexyl)Phthalate, Di(2-Ethylhexyl)Phthalate, DOP, Di-Sec-Octyl Phthalate
Diaminotoluene, [2,4-]	95-80-7	0.02	2,4-Toluene Diamine, 3-Amino-Para-Toluidine, 5-Amino-Ortho-Toluidine
Diazomethane	334-88-3	1	Azimethylene, Diazirine
Dibenz(a,h)anthracene	53-70-3	0.01	1,2,5,6-Benzanthracene, Dibenzo(a,h)anthracene
Dioxins/Furans (Note 9)		6.E-7	Polychlorinated Dibenzodioxin (PCDD), Polychlorinated Dibenzofurans (PCDF)
Dibenzofuran	132-64-9	5	Diphenylene Oxide

Dibromo-3-Chloropropane, [1,2-]	96-12-8	0.01	DBCP
Dibromomethane, [1,2-]	106-93-4	0.1	Ethylene Dibromide, Ethylene Bromide, Sym-Dibromoethane
Dibutyl Phthalate	84-74-2	10	DBP, Dibutyl 1,2-Benzenedicarboxylate, Di-N-Butylphthalate
Dichlorobenzene, [1,4-]	106-46-7	3	1,4-Dichloro-P-DCB, 1-4-DCB, PDB, PDCB
Dichlorobenzidene, [3,3-]	91-94-1	0.2	4,4'-Diamino-3,3'-Dichlorobiphenyl, 3,3'-Dichlorobiphenyl-4,4'-Diamine, DCB
Dichloroethane, [1,1-]	75-34-3	1	Ethylidene Dichloride, 1,1-Ethylidene Dichloride, Asymmetrical Dichloroethane
Dichloroethane, [1,2-]	107-06-2	0.8	Ethylene Dichloride, Glycol Dichloride, Ethylene Chloride
Dichloroethylene, [1,1-]	75-35-4	0.4	Vinylidene Chloride, DCE, VDC
Dichloromethane	75-90-2	10	Methylene Chloride, Methane Dichloride
Dichlorophenoxyacetic acid, [2,4-] (Note 6)	94-75-7	10	2,4-D Acid
Dichloropropane, [1,2-]	78-87-5	1	Propylene Dichloride
Dichloropropene [1,3-]	542-75-6	1	1,3-Dichloropropylene, Alpha-Chlorallyl Chloride
Dichlorvos	62-73-7	0.2	DDVP, 2,2-Dichlorovinyl dimethylphosphate
Diethanolamine	11-42-2	5	Bis(2-Hydroxyethyl)Amine, 2,2'-Dihydroxydiethylamine, Di(2-Hydroxyethyl)Amine
Diethyl Sulfate	64-67-5	1	Diethyl Ester Sulfuric Acid, Ethyl Sulfate
Diethylene Glycol Monobutyl Ether	112-34-5	5	2-(2-Butoxyethoxy)ethanol, Butyl Carbitol, Butyl Digol
Dimethoxybenzidine, [3,3-]	119-90-4	0.1	Fast Blue B Base, Dianisidine, O-Dianisidine
Dimethyl Benzidine, [3,3-]	119-93-7	0.008	O-Tolidine, Bianisidine, 4,4'-Diamino-3,3'-Dimethylbiphenyl, Diaminoditoyl
Dimethyl Carbamoyl Chloride	79-44-7	0.02	DMCC, Chloroformic Acid Dimethyl Amide, Dimethyl Carbamyl Chloride
Dimethyl Formamide	68-12-2	1	DMF, Formyldimethylamine
Dimethyl Hydrazine, [1,1-]	57-14-7	0.008	Unsymmetrical Dimethylhydrazine, UDMH, Dimazine
Dimethyl Phthalate*	131-11-3	10	Phthalic Acid, Dimethyl Ester, Dimehtyl 1,2-Benzenedicarboxylate, DMP
Dimethyl Sulfate	77-78-1	0.1	Sulfuric Acid Dimethyl Ester, Methyl Sulfate, DMS
Dimethylaminoazobenzene, [4-]	60-11-7	1	N,N-Dimethyl-P-Phenylazo-Aniline, Benzeneazo Dimethylaniline
Dimethylaniline, [N,N-]	121-69-7	1	N,N-Diethyl Aniline, N,N-Dimethylphenylamine, DMA
Dinitro-O-Cresol, [4,6-] (Note 6)	534-52-1	0.1	DNOC, 3,5-Dinitro-O-Cresol, 2-Methyl-4,6-Dinitrophenol
Dinitrophenol, [2,4-]	51-28-5	1	DNP
Dinitrotoluene, [2,4-]	121-14-2	0.02	Dinitrotoluol, DNT, 1-Methyl-2,4-Dinitrobenzene
Dioxane, [1,4-]	123-91-1	6	1,4-Diethyleneoxide, Diethylene Ether, P-Dioxane
Diphenylhydrazine, [1,2-]	122-66-7	0.09	Hydrazobenzene, N,N'-Diphenylhydrazine, N,N'-Bianiline, 1,1'-Hydrodibenzene
Diphenylmethane Diisocyanate, [4,4-]	101-68-8	0.1	Methylene Bis(Phenylisocyanate), Methylene Diphenyl Diisocyanate, MDI

Epichlorohydrin	106-89-8	2	1-Chloro-2,3-Epoxypropane, EPI, Chloropropylene Oxide, Chloromethyloxirane
Ethoxy Ethanol, [2-]	110-80-5	10	Cellosolve Solvent, Ethylene Glycol Monoethyl Ether
Ethoxyethyl Acetate, [2-]	111-15-9	5	Cellosolve Acetate, EGEEA, Ethylene Glycol Monoethyl Acetate
Ethyl Acrylate	140-88-5	1	Ethyl Propenoate, Acrylic Acid Ethyl Ester
Ethyl Benzene	100-41-4	10	Ethylbenzol, Phenylethane, EB
Ethyl Chloride	75-00-3	10	Chloroethane, Monochloroethane, Hydrochloric Ether
Ethylene Glycol	107-21-1	10	1,2-Ethanediol, Glycol Alcohol, Blycol, EG
Ethylene Glycol Monobutyl Ether (Delisted)	111-76-2		Butyl Cellosolve, 2-Butoxyethanol
Ethylene Glycol Monohexyl Ether	112-25-4	5	Glycol monohexyl Ether, N-Hexyl Glycol, EGHE, Hexyl Cellosolve
Ethylene Imine (Aziridine)	151-56-4	0.003	Azacyclopropane, Dimethyleneimine, Ethylenimine, Vinylamine, Azirane
Ethylene Oxide	75-21-8	0.1	1,2-Epoxyethane, Oxirane, Dimethylene Oxide, Anprolene
Ethylene Thiourea	96-45-7	0.6	2-Imidazolidinethione, ETU
Formaldehyde	50-00-0	2	Oxymethylene, Formic Aldehyde, Methanal, Methylene Oxide, Oxomethane
Glycol Ethers (Ethylene Glycol Ethers)(Notes 3, 5)		5	
Glycol Ether (Diethylene Glycol Ethers)(Notes 3, 5)		5	
Heptachlor	76-44-8	0.02	1,4,5,6,7,8,8A-Heptachloro-3A,4,7,7A-Tetrahydro-4,7-Methanoindiene
Hexachlorobenzene	118-74-1	0.01	Perchlorobenzene, HCB, Pentachlorophenyl Benzene, Phenyl Perchloryl
Hexachlorobutadiene	87-68-3	0.9	Perchlorobutadiene, 1,3-Hexachlorobutadiene, HCB
Hexachlorocyclohexane, [Alpha-]	319-84-6	0.01	Benzene Hexachloride-Alpha isomer, ENT-9232, Alpha-Lindane, Alpha-BHC
Hexachlorocyclohexane, [Beta-]	319-85-7	0.01	Trans-Alpha Benzenehexachloride, Beta-BHC, Beta-Lindane, Beta-Hexachlorobenzene
Hexachlorocyclohexane, [Delta-]	319-86-8	0.01	Delta-Benzene Hexachloride, Delta-BHC, Delta-Lindane, ENT-9236
Hexachlorocyclohexane, [Technical]	608-73-1	0.01	Benzene hexachloride, HCH, BHC, ENT-8601, Gammexane, Compound-666
Hexachlorocyclopentadiene	77-47-4	0.1	HCCPD, HEX
Hexachloroethane	67-72-1	5	Perchloroethane, Carbon Hexachloride, HCE, 1,1,1,2,2,2-Hexachloroethane
Hexamethylene Diisocyanate, 1,6-	822-06-0	0.02	1,6-Diisocyanatohexane, 1,6-Hexanediol Diisocyanate
Hexamethylphosphoramide	680-31-9	0.01	Hexamethylphosphoric Triamide, HEMPA, Hexametapol, Hexamethylphosphoramide
Hexane	110-54-3	10	Hexane, NCI-c60571
Hydrazine	302-01-2	0.004	Methylhydrazine, Diamide, Diamine, Hydrazine Base
Hydrogen Chloride	7647-01-0	10	Hydrochloric Acid, Muriatic Acid, Anhydrous Hydrochloric Acid

Hydrogen Fluoride	7664-39-3	0.1	Hydrofluoric Acid Gas, Fluorhydric Acid Gas, Anhydrous Hydrofluoric Acid
Hydroquinone	123-31-9	1	Quinol, Hydroquinol, P-Diphenol, 1,4-Benzenediol, Hydrochinone, Arctuin
Indeno(1,2,3-cd)Pyrene	193-39-5	0.01	
Isophorone	78-59-1	10	3,3,5-Trimethyl-2-Cyclohexene-1-One, Trimethylcyclohexone, Isoacetophorone
Lead Compounds (Notes 2, 4)	20-11-1	0.01	Lead (Arsenate, Chloride, Fluoride, Iodide, Nitrate, Sulfate, Sulfide), Lead Acetate (CAS 301-04-2), Lead Subacetate (CAS 13335-32-6), Tetraethyl lead (CAS 78-00-2)
Lindane [Gamma-Hexachlorocyclohexane] (Notes 3, 5)	58-89-9	0.01	Benzene Hexachloride – Gamma Isomer
Maleic Anhydride	108-31-6	1	2,5-Furandiene, Cis-Butenedioic Anhydride, Toxilic Anhydride
Manganese Compounds (Notes 2, 4)	20-12-2	0.8	Manganese (Acetate, Chloride, Dioxide, (II)-Oxide, (III)-Oxide, (II)-Sulfate), MANEB (CAS 12427-38-2), Elemental Manganese (CAS 7439-96-5), Methylcyclopentadienyl Manganese (CAS 12108-13-3)
Mercury Compounds (Notes 2, 4)	20-13-3	0.01	Mercury (Chloride, Cyanide, (I,II)-[Bromide, Iodide, Nitrate, Sulfate], Oxide), Elemental Mercury (CAS 7439-97-6), Colloidal Mercury, Quick Silver, NCI-c60399, (Alkyl & Aryl), Methyl Mercury (CAS 22967-92-6), Phenyl Mercuric Acetate (CAS 62-38-4)
Methanol	67-56-1	10	Methyl Alcohol, Carbinol, Wood Alcohol, Wood Spirit
Methoxychlor	72-43-5	10	2,2-Bis(P-Methoxyphenyl)-1,1,1-Trichloroethane, Dimethoxy-DDT
Methoxy Ethanol, [2-]	108-86-4	10	Ethylene Glycol Monomethyl Ether, Methol Cellosolve
Methyl Chloride	74-87-3	10	Chloromethane, Monochloromethane
Methyl Ethyl Ketone (Delisted)	78-93-3		2-Butanone, MEK, Butanone, Ethyl Methyl Ketone
Methyl Hydrazine	60-34-4	0.06	Monomethylhydrazine, Hydrozomethane, 1-Methylhydrazine
Methyl Iodide	74-88-4	1	Idomethane
Methyl Isobutyl Ketone	108-10-1	10	Hexone, 4-Methyl-2-Pentanone, Isobutyl Methyl Ketone, MIBK
Methyl Isocyanate	624-83-9	0.1	Isocyanatomethane, Isocyanic Acid, Methyl Ester
Methyl Methacrylate	80-62-6	10	Methyl-2-Methyl-2-Propenoate, Methacrylic Acid, Methyl Ester, MME
Methyl Tert-Butyl Ether	12108-13-3	10	MTBE
Methylcyclopentadienyl Manganese	12108-13-3	0.1	
Methylene Bis(2-Chloroaniline), [4,4-]	101-14-4	0.2	Curene, MOCA, 4,4'-Diamino-3,3'-Dichlorodiphenylmethane
Methylenedianiline, [4,4-]	101-77-9	1	4,4'-Diaminodipheylmethane, DDM, MDA, Bis(4-Aminophenyl)Methane, DAPM
Mineal Fibers (Notes 1, 2, 5)		0	
Naphthalene	91-20-3	10	Naphthalin, Moth Flake, Tar Caphor, White Tar, Moth Balls
Naphthylamine [Alpha-]	134-32-7	0.01	1-Naphthylamine, 1-Aminonaphthalene, Naphthallidine
Naphthylamine, [Beta-]	91-59-8	0.01	2-Aminonaphthalene, 6-Naphthylamine, 2-Naphthylamine Mustard

Nickel Carbonyl	13463-39-3	0.1	Nickel Tetracarbonyl
Nickel Compounds (Notes 2, 4)		1	Nickel (Acetate, Ammonium Sulfate, Chloride, Hydroxide, Nitrate, Oxide, Sulfate), Nickel Oxide (CAS 1313-99-1), nickel Refinery Dust, Nickel Subsulfide (CAS 12035-72-2), Elemental Nickel (CAS 7440-02-0), Nickel Carbonyl (CAS 13463-39-3)
Nickel Refinery Dust	12035-72-2	0.08	Nickel Dust (CAS 7440-02-0), Nickel Particles
Nickel Subsulfide		0.04	Nickel Sulphide, Heazlewoodite, Nickel Tritadisulphide
Nitrobenzene	98-95-3	1	Nitrobenzoin, Oil of Mirbane, Oil of Bitter Almonds
Nitrobiphenyl, [4-]	92-93-3	1	4-Nitrodiphenyl, P-Nitrobiphenyl, P-Nitrophenyl, PNB
Nitrophenol, [4-]	100-02-7	5	4-Hydroxynitrobenzene, Para-Nitrophenol
Nitropropane, [2-]	79-46-9	1	Dimethylnitromethane, Sec-Nitropropane, Isonitropropane, Nitroisopropane
Nitrosodimethylamine, [N-]	62-75-9	0.001	Dimethylnitrosamine, DMN, DMNA
Nitrosomorpholine, [N-]	59-89-2	1	4-Nitrosomorpholine
Nitroso-N-MethylUrea, [N-]	684-93-5	0.0002	N-Methyl-N-Nitrosourea, N-Nitroso-N-Methylcarbamide
Octachloronaphthalene	2234-13-1	0.01	Halowax 1051
Parathion	56-38-2	0.1	DNTP, Monothiophosphate, Diethyl-P-Nitrophenyl
PCB (Polychlorinated Biphenyls)	1336-36-3	0.009	Aroclors
Pentachloronitrobenzene	82-68-8	0.3	Quintobenzene, PCNB, Quiniozene
Pentachlorophenol	87-86-5	0.7	PCP, Penchlorol, Pentachlorophenate, 2,3,4,5,6-Pentachlorophenol
Phenol	108-95-2	0.1	Carbolic Acid, Phenic Acid, Phenylic Acid, Phenyl Hydrate, Hydroxybenzene
Phenylenediamine, [para-]	106-50-3	10	P-Aminoaniline, 1,4-Diaminobenzene, Benzenediamine, Para
Phosgene	75-44-5	0.1	Carbonyl Chloride, Carbon Oxychloride, Carbonic Acid Dichloride
Phosphine	7803-51-2	5	Hydrogen Phosphide, Phosphoretted Hydrogen, Phosphorus Trihydride
Phosphorous (Yellow or White)	7723-14-0	0.1	Common Sense Cockroach and Rate Preparations
Phthalic Anhydride	85-44-9	5	Phthalic Acid Anhydride, Benzene-O-Dicarboxylic Acid Anhydride, Phthalandione
Polycyclic Organic Matter (Notes 3, 5)	TP15	0.01	POM, PAH, Polyaromatic Hydrocarbons,
Propane Sultone, [1,3-]	1120-71-4	0.03	1,2-Oxathiolane-2,2-Dioxide, 3-Hydroxy-1-Propanesulphonic Acid Sultone
Propiolactone, [Beta-]	57-57-8	0.1	2-Oxeatanone, Propiolactone, BPL, 3-Hydroxy-B-Lactone-Propanoic Acid
Propionaldehyde	123-38-6	5	Propanal, Propyl Aldehyde, Propionic Aldehyde
Propoxur [Baygon]	114-26-1	10	O-Isopropoxyphenol Methylcarbamate, 2-(1-Methyloxy)Phenol Methylcarbamate
Propylene Oxide	75-56-9	5	1,2-Epoxypropane, Methylethylene Oxide, Methyl Oxirane, Propene Oxide

Propyleneimine, [1,2-]	75-55-8	0.003	2-Methyl Aziridine, 2-Methylazacyclopropane, Methylethyleneimine
Quinoline	91-22-5	0.006	1-Azanaphthalene, 1-Benzazine, Benzo(B)Pyridine, Chinoleine, Leucoline
Quinone	016-51-4	5	Benzoquinone, Chinone, P-Benzoquinone, 1,4-Benzoquinone
Radionuclides		(note 9)	Radon 222 (CAS 14859-67-7), Radium 226, 228 (CAS 7440-14-4), Uranium (Natural) (CAS 7440-61-1)
Selenium Compounds (Notes 2, 4)	7782-49-2	0.1	Selenium (Metal, Dioxide, Disulfide, Hexafluoride), Elemental Selenium (CAS 7782-49-2), Selenious Acid (CAS 7783-00-8), Selenium Sulfide (CAS 7446-34-6), Selenourea (CAS 630-10-4), Thallium Selenite (CAS 12039-52-0)
Styrene	100-42-5	1	Cinnamene, Cinnamol, Phenethylene, Phenylethylene, Vinylbenzene
Styrene Oxide	96-09-3	1	Epoxyethylbenzene, Phenylethylene Oxide, Phenyl Oxirane, Epoxystyrene
Tetrachlorodibenzo-P-Dioxin,[2,3,7,8] (Note 9)	1746-01-6	6E-7	TCDD
Tetrachloroethane, [1,1,2,2-]	79-34-5	0.3	Sym-Tetachloroethane, Acetylene Tetrachloride, Ethane Tetrachloride
Tetrachloroethylene	127-18-4	10	Perchloroethylene
Titanium Tetrachloride	7550-45-0	0.1	Titanium Chloride
Toluene	108-88-3	10	Toluol, MethylBenzene, Phenylmethane, MethylBenzol
Toluene Diisocyanate, [2,4-]	584-84-9	0.1	TDI, Tolyene Diisocyanate, Diisocyanatoluene
Toluidine, [Ortho-]	95-53-4	4	Ortho-Aminotoluene, Ortho-Methylaniline, 1-Methyl-1,2-Aminobenzene
Toxaphene	8001-35-2	0.01	Chlorinated Camphene, Camphechlor, Polychlorcamphene
Trichlorobenzene [1,2,4-]	120-82-1	10	Umsym-Trichlorobenzene
Trichloroethane, [1,1,1-]	71-55-6	10	Methyl Chloroform
Trichloroethane, [1,1,2-]	79-00-5	1	Vinyl Trichloride, Beta-Trichloroethane
Trichloroethylene	79-01-6	10	Ethylene Trichloride, Ethinyl Trichloride, Trichloroethene, TRI, TCE
Trichlorophenol, [2,4,5-]	95-95-4	1	2,4,5-TCP
Trichlorophenol, [2,4,6-]	88-06-2	6	2,4,6-TCP
Triethylamine*	121-44-8	10	N,N-Diethylethanamine, TEA, (Diethylamino)Ethane
Trifluralin	1582-09-8	9	2,6-Dinitro-N-N-Dipropyl-4-(Trifluoromethyl)Benzeneamine
Trimethylpentane, [2,2,4-]	540-84-1	5	Isobutyltrimethylethane, Isoctane
Urethane [Ethyl Carbamate]	51-79-6	0.8	Ethyl Urethane, O-Ethylurethane, Leucothane, NSC 746, Urethan
Vinyl Acetate	108-05-4	1	Acetic Acid Vinyl Ester, Vinyl Acetate Monomer, Ethenyl Ethanoate
Vinyl Bromide	593-60-2	0.6	Bromoethylene, Bromoethene
Vinyl Chloride	75-01-4	0.2	Chloroethylene, Chloroethene, Monochloroethylene
Xylene, [meta-] (Notes 5, 11)	108-38-3	10	M-Dimethylbenzene, 1,3-Xylene, 1,3-Dimethylbenzene, M-Xylol
Xylene, [ortho-] (Notes 5, 11)	95-47-6	10	O-Xylol, O-Dimethylbenzene, O-methyltoluene, 1,2-Xylene, 1,2-Dimethylbenzene
Xylene, [para-] (Notes 5, 11)	106-42-3	10	P-dimethylbenzene, P-Methyltoluene, 1,4-Xylene, 1,4-Dimethylbenzene, P-Xylol

Xylenes (Mixed Isomers) (Notes 5, 11)	1330-20-7	10	Aromatic hydrocarbons Mixed, Diethylbenzene
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Note 1: Includes mineral fiber emissions from facilities manufacturing or processing glass, rock, or slag fibers (or other mineral derived fibers) of average diameter 1 micrometer or less.

Note 2: For those compounds specifically listed, emissions of compounds in this aggregate group are combined for comparison to the SMALS.

Note 3: Emissions of compounds in this aggregate group are not combined for comparison to the SMAL.

Note 4: Mass of the metal portion of the compound is used to determine emissions for comparison to the SMALS.

Note 5: The total mass of the compound is used to determine emissions for comparison to the SMALS.

Note 6: For these compounds, emissions within the same aggregate group are combined for comparison to the SMALS and the 2,4-D portion of the 2,4-D salts and esters and the Dinitro-ortho-cresol (DNOC) portion of 4,6 Dinitro-o-cresol salts are used to determine emissions for comparison to the SMALS.

Note 7: Except for those compounds specifically listed, emissions of cyanide compounds are combined and the mass of the cyanide portion of the compound is used to determine emissions for comparison to the SMALS. For those compounds specifically listed in the table, emissions are not combined and the total mass of the compound is used for comparison to the SMAL.

Note 8: The SMAL for radionuclides is defined as the effective dose equivalent to 0.3 millirems per year for 7 year exposure associated with a cancer risk of 1 in 1 million.

Note 9: For comparison to the SMAL, emissions of polychlorinated dibenzodioxins & polychlorinated dibenzofurans (PCDD/PCDF) and polychlorinated biphenyls (PCB) are scaled according to the toxic equivalency factor method and then combined for comparison to the RAL:

- 1) Scale the annual emissions of each PCDD/PCDF and PCB by its respective toxic equivalency factor (TEF)
- 2) After the emissions are scaled, combine them into a single potential annual emissions (tons/year) for comparison to the SMAL

Toxic Equivalency Factors for PCDD, PCDF, and PCB compounds

PCDDs	TEF	PCDFs	TEF	PCBs	TEF
2,3,7,8-TCDD	1.0	2,3,7,8-TCDF	0.1	3,3',4,4'-TCB (77)	0.0001
1,2,3,7,8-PeCDD	1.0	1,2,3,7,8-PeCDF	0.03	3,4,4',5-TCB (81)	0.0003
1,2,3,4,7,8-HxCDD	0.1	2,3,4,7,8-PeCDF	0.3	3,3',4,4',5-PeCB (126)	0.1
1,2,3,7,8,9-HxCDD	0.1	1,2,3,4,7,8-HxCDF	0.1	3,3',4,4',5,5'-HxCB (169)	0.03
1,2,3,6,7,8-HxCDD	0.1	1,2,3,7,8,9-HxCDF	0.1	2,3,3',4,4' PeCB (105)	0.00003
1,2,3,4,6,7,8-HpCDD	0.01	1,2,3,6,7,8-HxCDF	0.1	2,3,4,4',5 PeCB (114)	0.00003
1,2,3,4,6,7,8,9-OCDD	0.0003	2,3,4,6,7,8-HxCDF	0.1	2,3',4,4',5 PeCB (118).	0.00003
		1,2,3,4,6,7,8-HpCDF	0.01	2',3,4,4',5 PeCB (123)	0.00003
		1,2,3,4,7,8,9-HpCDF	0.01	2,3,3',4,4',5-HxCB (156)	0.00003
		1,2,3,4,6,7,8,9-OCDF	0.0003	2,3,3',4,4',5-HxCB (157)	0.00003
				2,3',4,4',5,5'-HxCB (167)	0.00003
				2,3,3',4,4',5,5'-HpCB (189)	0.00003

Note 10: Chromium (VI) compounds, also known as hexavalent chromium compounds, are combined for comparison to the SMAL for Chromium (VI) compounds. Chromium Compounds of all other oxidation states [i.e. excluding Chromium (VI) Compounds] are combined for comparison to the SMAL for Chromium Compounds.

Note 11: Emissions of all isomers are combined and compared to the SMAL for any of the listed isomers as they are all the same.

Mr. Jason Hutchens
R & D Director
Undercover, Inc.
PO Box 620
Rogersville, MO 65742

RE: New Source Review Permit - Project Number: 2010-10-012

Dear Mr. Hutchens:

Enclosed with this letter is your permit to construct. Please study it carefully. Also, note the special conditions, if any, on the accompanying pages. The document entitled, "Review of Application for Authority to Construct," is part of the permit and should be kept with this permit in your files. Operation in accordance with these conditions, your new source review permit application and with your amended operating permit is necessary for continued compliance. The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

If you have any questions regarding this permit, please do not hesitate to contact Chia-Wei Young, at the Department's Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, or by telephone at (573)751-4817. Thank you for your time and attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Kendall B. Hale
New Source Review Unit Chief

KBH:cyk

Enclosures

c: Southwest Regional Office
PAMS File: 2010-10-012

Permit Number: