PROPOSED CAAPP PERMIT
August 13, 2013

Attention:

Automotive Robotics Proving Lab (ARPL)
Attn: Tony Brown, ARPL
5 Altorfer Lane
East Peoria, Illinois 61611

State of Illinois

CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

[Title I and Title V Permit]

Source:

Automotive Robotics Proving Lab (ARPL)
5 Altorfer Lane
East Peoria, Illinois 61611

I.D. No.: 179020ADF
Permit No.: 10090024

Permitting Authority:

Illinois Environmental Protection Agency
Bureau of Air, Permit Section
217/785-1705

CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

[Title I and Title V Permit]

Type of Application:	New
Purpose of Application:	Issue New Permit to a Major Source
ID No.:	179020ADF
Permit No.:	10090024
Statement of Basis No.:	10090024-1209
Date Application Received:	September 10, 2010
Date Issued:	TBD
Expiration Date:	TBD
Renewal Submittal Date:	9 Months Prior to TBD
Source Name:	Automotive Robotics Proving Lab (ARPL)
Address:	5 Altorfer Lane
City:	East Peoria
County:	Tazewell
ZIP Code:	61611

This permit is hereby granted to the above-designated source authorizing operation in accordance with this CAAPP permit, pursuant to the above referenced application. This source is subject to the conditions contained herein. For further information on the source see Section 1 and for further discussion on the effectiveness of this permit see Condition 2.3(g).

If you have any questions concerning this permit, please contact Jonathan Smith at 217/785-1705.

Edwin C. Bakowski, P.E.
Manager, Permit Section
Division of Air Pollution Control

ECB:MTR:JDS:jws

cc: IEPA, Permit Section
IEPA, FOS, Region 2

Table of Contents

Section		Page
1	**Source Information**	**3**
	1.1 Addresses	
	1.2 Contacts	
	1.3 Single Source	
2	**General Permit Requirements**	**4**
	2.1 Prohibitions	
	2.2 Emergency Provisions	
	2.3 General Provisions	
	2.4 Testing	
	2.5 Recordkeeping	
	2.6 Certification	
	2.7 Permit Shield	
	2.8 Title I Conditions	
	2.9 Reopening and Revising Permit	
	2.10 Emissions Trading Programs	
	2.11 Permit Renewal	
	2.12 Permanent Shutdown	
	2.13 Startup, Shutdown, and Malfunction	
3	**Source Requirements**	**12**
	3.1 Applicable Requirements	
	3.2 Applicable Plans and Programs	
	3.3 Title I Requirements	
	3.4 Synthetic Minor Limits	
	3.5 Reporting Requirements	
4	**Emission Unit Requirements**	**18**
	4.1 Engine Test Cells	
5	**Additional Title I Requirements**	**23**
6	**Insignificant Activities Requirements**	**24**
	6.1 Insignificant Activities Subject to Specific Regulations	
	6.2 Insignificant Activities in 35 IAC 201.210(a)	
	6.3 Insignificant Activities in 35 IAC 201.210(b)	
	6.4 Applicable Requirements	
	6.5 Compliance Method	
	6.6 Notification Requirements for Insignificant Activities	
7	**Other Requirements**	**27**
	7.1 Testing	
8	**State Only Requirements**	**29**
	8.1 Permitted Emissions for Fees	
Attachment 1	**List of Emission Units at This Source**	**30**
Attachment 2	**Acronyms and Abbreviations**	**31**
Attachment 3	**Contact and Reporting Addresses**	**33**
Attachment 4	**Example Certification by a Responsible Official**	**34**

Section 1 – Source Information

1. Addresses

Source

Automotive Robotics Proving Lab (ARPL)
5 Altorfer Lane
East Peoria, Illinois 61611

Owner

Ravi Gudapati
5 Altorfer Lane
East Peoria, Illinois 61611

Operator

Ravi Gudapati
5 Altorfer Lane
East Peoria, Illinois 61611

Permittee

The Owner or Operator of the source as identified in this table.

2. Contacts

Certified Officials

The source shall submit an Administrative Permit Amendment for any change in the Certified Officials, pursuant to Section 39.5(13) of the Act.

	Name	*Title*
Responsible Official	Anthony L. Brown	Quality and Environmental Manager
Delegated Authority	No other individuals have been authorized by the IEPA.	N/A

Other Contacts

	Name	*Phone No.*	*Email*
Source Contact	Anthony L. Brown	(309)740-2678	abrown@autorobinc.com
Technical Contact	Anthony L. Brown	(309)740-2678	abrown@autorobinc.com
Correspondence	Anthony L. Brown	(309)740-2678	abrown@autorobinc.com
Billing	Anthony L. Brown	(309)740-2678	abrown@autorobinc.com

3. Single Source

The source identified in Condition 1.1 above shall be defined to include all the following additional source(s):

I.D. No.	*Permit No.*	*Single Source Name and Address*
N/A	N/A	N/A

Section 2 – General Permit Requirements

1. Prohibitions

a. It shall be unlawful for any person to violate any terms or conditions of this permit issued under Section 39.5 of the Act, to operate the CAAPP source except in compliance with this permit issued by the IEPA under Section 39.5 of the Act or to violate any other applicable requirements. All terms and conditions of this permit issued under Section 39.5 of the Act are enforceable by USEPA and citizens under the Clean Air Act, except those, if any, that are specifically designated as not being federally enforceable in this permit pursuant to Section 39.5(7)(m) of the Act. [Section 39.5(6)(a) of the Act]

b. After the applicable CAAPP permit or renewal application submittal date, as specified in Section 39.5(5) of the Act, the source shall not operate this CAAPP source without a CAAPP permit unless the complete CAAPP permit or renewal application for such source has been timely submitted to the IEPA. [Section 39.5(6)(b) of the Act]

c. No Owner or Operator of the CAAPP source shall cause or threaten or allow the continued operation of an emission source during malfunction or breakdown of the emission source or related air pollution control equipment if such operation would cause a violation of the standards or limitations applicable to the source, unless this CAAPP permit granted to the source provides for such operation consistent with the Act and applicable Illinois Pollution Control Board regulations. [Section 39.5(6)(c) of the Act]

d. Pursuant to Section 39.5(7)(g) of the Act, emissions from the source are not allowed to exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act or the regulations promulgated thereunder, consistent with Section 39.5(17) of the Act and applicable requirements, if any.

2. Emergency Provisions

Pursuant to Section 39.5(7)(k) of the Act, the Owner or Operator of the CAAPP source may provide an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations under this CAAPP permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence:

a. i. An emergency occurred and the source can identify the cause(s) of the emergency.

ii. The source was at the time being properly operated.

iii. The source submitted notice of the emergency to the IEPA within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

iv. During the period of the emergency the source took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or requirements in this permit.

b. For purposes of Section 39.5(7)(k) of the Act, “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, such as an act of God, that requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operation error.

c. In any enforcement proceeding, the source seeking to establish the occurrence of an emergency has the burden of proof. This provision is in addition to any emergency or

upset provision contained in any applicable requirement. This provision does not relieve the source of any reporting obligations under existing federal or state laws or regulations.

3. General Provisions

a. Duty to Comply

The source must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. [Section 39.5(7)(o)(i) of the Act]

b. Need to Halt or Reduce Activity is not a Defense

It shall not be a defense for the source in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [Section 39.5(7)(o)(ii) of the Act]

c. Duty to Maintain Equipment

The source shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements. [Section 39.5(7)(a) of the Act]

d. Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated there under. [Section 39.5(7)(a) of the Act]

e. Duty to Pay Fees

i. The source must pay fees to the IEPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto. [Section 39.5(7)(o)(vi) of the Act]

ii. The IEPA shall assess annual fees based on the allowable emissions of all regulated air pollutants, except for those regulated air pollutants excluded in Section 39.5(18)(f) of the Act and insignificant activities in Section 6, at the source during the term of this permit. The amount of such fee shall be based on the information supplied by the applicant in its complete CAAPP permit application. [Section 39.5(18)(a)(ii)(A) of the Act]

iii. The check should be payable to “Treasurer, State of Illinois” and sent to: Fiscal Services Section, Illinois EPA, P.O. Box 19276, Springfield, IL, 62794-9276. Include on the check: ID #, Permit #, and “CAAPP Operating Permit Fees”. [Section 39.5(18)(e) of the Act]

f. Obligation to Allow IEPA Surveillance

Pursuant to Sections 4(a), 39.5(7)(a), and 39.5(7)(p)(ii) of the Act, inspection and entry requirements that necessitate that, upon presentation of credentials and other documents as may be required by law and in accordance with constitutional limitations, the source shall allow the IEPA, or an authorized representative to perform the following:

i. Enter upon the source’s premises where the emission unit(s) are located or emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit.

iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

iv. Sample or monitor any substances or parameters at any location at reasonable times:

A. As authorized by the Clean Air Act or the Act, at reasonable times, for the purposes of assuring compliance with this CAAPP permit or applicable requirements; or

B. As otherwise authorized by the Act.

v. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source authorized by this permit.

g. <u>Effect of Permit</u>

i. Pursuant to Section 39.5(7)(j)(iv) of the Act, nothing in this CAAPP permit shall alter or affect the following:

A. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section.

B. The liability of the Owner or Operator of the source for any violation of applicable requirements prior to or at the time of permit issuance.

C. The applicable requirements of the acid rain program consistent with Section 408(a) of the Clean Air Act.

D. The ability of USEPA to obtain information from the source pursuant to Section 114 (inspections, monitoring, and entry) of the Clean Air Act.

ii. Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, pursuant to Sections 39.5(7)(j) and (p) of the Act, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements. [35 IAC 201.122 and Section 39.5(7)(a) of the Act]

h. <u>Severability Clause</u>

The provisions of this permit are severable. In the event of a challenge to any portion of this permit, other portions of this permit may continue to be in effect. Should any portion of this permit be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected and the rights and obligations of the source shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements underlying these provisions shall remain in force. [Section 39.5(7)(i) of the Act]

4. Testing

a. Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods if applicable test methods are not specified by the applicable regulations or otherwise identified in the conditions of this permit. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of

any tests conducted as required by this permit or as the result of a request by the IEPA shall be submitted as specified in Condition 7.1 of this permit. [35 IAC Part 201 Subpart J and Section 39.5(7)(a) of the Act]

b. Pursuant to Section 4(b) of the Act and 35 IAC 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator: The IEPA may require the Owner or Operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the IEPA, at such reasonable times as may be specified by the IEPA and at the expense of the Owner or Operator of the emission source or air pollution control equipment. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The IEPA shall have the right to observe all aspects of such tests.

ii. Testing by the IEPA: The IEPA shall have the right to conduct such tests at any time at its own expense. Upon request of the IEPA, the Owner or Operator of the emission source or air pollution control equipment shall provide, without charge to the IEPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

5. Recordkeeping

a. Control Equipment Maintenance Records

Pursuant to Section 39.5(7)(b) of the Act, a maintenance record shall be kept on the premises for each item of air pollution control equipment. At a minimum, this record shall show the dates maintenance was performed and the nature of preventative maintenance activities.

b. Retention of Records

i. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. [Section 39.5(7)(e)(ii) of the Act]

ii. Pursuant to Section 39.5(7)(a) of the Act, other records required by this permit including any logs, plans, procedures, or instructions required to be kept by this permit shall be retained for a period of at least 5 years from the date of entry unless a different period is specified by a particular permit provision.

c. Availability of Records

i. Pursuant to Section 39.5(7)(a) of the Act, the Permittee shall retrieve and provide paper copies, or as electronic media, any records retained in an electronic format (e.g., computer) in response to an IEPA or USEPA request during the course of a source inspection.

ii. Pursuant to Section 39.5(7)(a) of the Act, upon written request by the IEPA for copies of records or reports required to be kept by this permit, the Permittee shall promptly submit a copy of such material to the IEPA. For this purpose, material shall be submitted to the IEPA within 30 days unless additional time is provided by the IEPA or the Permittee believes that the volume and nature of

requested material would make this overly burdensome, in which case, the Permittee shall respond within 30 days with the explanation and a schedule for submittal of the requested material. (See also Condition 2.9(d))

6. Certification

a. Compliance Certification

i. Pursuant to Section 39.5(7)(p)(v)(C) of the Act, the source shall submit annual compliance certifications by May 1 unless a different date is specified by an applicable requirement or by a particular permit condition. The annual compliance certifications shall include the following:

A. The identification of each term or condition of this permit that is the basis of the certification.

B. The compliance status.

C. Whether compliance was continuous or intermittent.

D. The method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.

ii. Pursuant to Section 39.5(7)(p)(v)(D) of the Act, all compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the IEPA Compliance Section. Addresses are included in Attachment 3.

iii. Pursuant to Section 39.5(7)(p)(i) of the Act, all compliance reports required to be submitted shall include a certification in accordance with Condition 2.6(b).

b. Certification by a Responsible Official

Any document (including reports) required to be submitted by this permit shall contain a certification by the responsible official of the source that meets the requirements of Section 39.5(5) of the Act and applicable regulations. [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included in Attachment 4 of this permit.

7. Permit Shield

a. Pursuant to Section 39.5(7)(j) of the Act, except as provided in Condition 2.7(b) below, the source has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the IEPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit. This permit shield does not extend to applicable requirements which are promulgated after **Error! Bookmark not defined.**_____ (date USEPA notice started), unless this permit has been modified to reflect such new requirements.

b. Pursuant to Section 39.5(7)(j) of the Act, this permit and the terms and conditions herein do not affect the Permittee's past and/or continuing obligation with respect to statutory or regulatory requirements governing major source construction or modification under Title I of the CAA. Further, neither the issuance of this permit nor any of the terms or conditions of the permit shall alter or affect the liability of the Permittee for any violation of applicable requirements prior to or at the time of permit issuance.

c. Pursuant to Section 39.5(7)(a) of the Act, the issuance of this permit by the IEPA does not and shall not be construed as barring, diminishing, adjudicating or in any way affecting any currently pending or future legal, administrative or equitable rights or claims, actions, suits, causes of action or demands whatsoever that the IEPA or the USEPA may have against the applicant including, but not limited to, any enforcement action authorized pursuant to the provision of applicable federal and state law.

8. Title I Conditions

Pursuant to Sections 39(a), 39(f), and 39.5(7)(a) of the Act, as generally identified below, this CAAPP permit may contain certain conditions that relate to requirements arising from the construction or modification of emission units at this source. These requirements derive from permitting programs authorized under Title I of the Clean Air Act (CAA) and regulations thereunder, and Title X of the Illinois Environmental Protection Act (Act) and regulations implementing the same. Such requirements, including the New Source Review programs for both major (i.e., PSD and nonattainment areas) and minor sources, are implemented by the IEPA.

a. This permit may contain conditions that reflect requirements originally established in construction permits previously issued for this source. These conditions include requirements from preconstruction permits issued pursuant to regulations approved or promulgated by USEPA under Title I of the CAA, as well as requirements contained within construction permits issued pursuant to state law authority under Title X of the Act. Accordingly, all such conditions are incorporated into this CAAPP permit by virtue of being either an “applicable Clean Air Act requirement” or an “applicable requirement” in accordance with Section 39.5 of the Act. These conditions are identifiable herein by a designation to their origin of authority.

b. This permit may contain conditions that reflect necessary revisions to requirements established for this source in preconstruction permits previously issued under the authority of Title I of the CAA. These conditions are specifically designated herein as “TIR”.

   i. Revisions to original Title I permit conditions are incorporated into this permit through the combined legal authority of Title I of the CAA and Title X of the Act. Public participation requirements and appeal rights shall be governed by Section 39.5 of the Act.

   ii. Revised Title I permit conditions shall remain in effect through this CAAPP permit, and are therefore enforceable under the same, so long as such conditions do not expire as a result of a failure to timely submit a complete renewal application or are not removed at the applicant’s request.

c. This permit may contain conditions that reflect new requirements for this source that would ordinarily derive from a preconstruction permit established under the authority of Title I of the CAA. These conditions are specifically designated herein as “TIN”.

   i. The incorporation of new Title I requirements into this CAAPP permit is authorized through the combined legal authority of Title I of the CAA and Title X of the Act. Public participation requirements and appeal rights shall be governed by Section 39.5 of the Act.

   ii. Any Title I conditions that are newly incorporated shall remain in effect through this CAAPP permit, and are therefore enforceable under the same, so long as such conditions do not expire as a result of a failure to timely submit a complete renewal application or are not removed at the applicant’s request.

9. Reopening and Revising Permit

a. <u>Permit Actions</u>

This permit may be modified, revoked, reopened and reissued, or terminated for cause in accordance with applicable provisions of Section 39.5 of the Act. The filing of a request by the source for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [Section 39.5(7)(o)(iii) of the Act]

b. Reopening and Revision

Pursuant to Section 39.5(15)(a) of the Act, this permit must be reopened and revised if any of the following occur:

i. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;

ii. Additional requirements become applicable to the source for acid deposition under the acid rain program;

iii. The IEPA or USEPA determines that this permit contains a material mistake or that an inaccurate statement was made in establishing the emission standards or limitations, or other terms or conditions of this permit; or

iv. The IEPA or USEPA determines that this permit must be revised or revoked to ensure compliance with the applicable requirements.

c. Inaccurate Application

Pursuant to Sections 39.5(5)(e) and (i) of the Act, the IEPA has issued this permit based upon the information submitted by the source in the permit application referenced on page 1 of this permit. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation or reopening of this CAAPP under Section 39.5(15) of the Act.

d. Duty to Provide Information

The source shall furnish to the IEPA, within a reasonable time specified by the IEPA any information that the IEPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the source shall also furnish to the IEPA copies of records required to be kept by this permit. [Section 39.5(7)(o)(v) of the Act]

10. Emissions Trading Programs

No permit revision shall be required for increases in emissions allowed under any USEPA approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement. [Section 39.5(7)(o)(vii) of the Act]

11. Permit Renewal

a. Upon the expiration of this permit, if the source is operated, it shall be deemed to be operating without a permit unless a timely and complete CAAPP application has been submitted for renewal of this permit. However, if a timely and complete application to renew this CAAPP permit has been submitted, the terms and all conditions of the most recent issued CAAPP permit will remain in effect until the issuance of a renewal permit. [Sections 39.5(5)(l) and (o) of the Act]

b. For purposes of permit renewal, a timely application is one that is submitted no less than 9 months prior to the date of permit expiration. [Section 39.5(5)(n) of the Act]

12. Permanent Shutdown

Pursuant to Section 39.5(7)(a) of the Act, this permit only covers emission units and control equipment while physically present at the source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

13. Startup, Shutdown, and Malfunction

Pursuant to Section 39.5(7)(a) of the Act, in the event of an action to enforce the terms or conditions of this permit, this permit does not prohibit a Permittee from invoking any affirmative defense that is provided by the applicable law or rule.

Section 3 – Source Requirements

1. Applicable Requirements

Pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act, the Permittee shall comply with the following applicable requirements. These requirements are applicable to all emission units (including insignificant activities unless specified otherwise in this Section) at the source.

a. Fugitive Particulate Matter

i. Pursuant to 35 IAC 212.301 and 35 IAC 212.314, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source unless the wind speed is greater than 25 mph.

ii. Compliance Method (Fugitive Particulate Matter)

Upon request by the IEPA, the Permittee shall conduct observations at the property line of the source for visible emissions of fugitive particular matter from the source to address compliance with 35 IAC 212.301. For this purpose, daily observations shall be conducted for a week for particular area(s) of concern at the source, as specified in the request, observations shall begin either within one day or three days of receipt of a written request from the IEPA, depending, respectively, upon whether observations will be conducted by employees of the Permittee or a third-party observer hired by the Permittee to conduct observations on its behalf. The Permittee shall keep records for these observations, including identity of the observer, the date and time of observations, the location(s) from which observations were made, and duration of any fugitive emissions event(s).

b. Ozone Depleting Substances

Pursuant to 40 CFR 82.150(b), the Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

i. Pursuant to 40 CFR 82.156, persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices.

ii. Pursuant to 40 CFR 82.158, equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment.

iii. Pursuant to 40 CFR 82.161, persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program.

iv. Pursuant to 40 CFR 82 Subpart B, any person performing service on a motor vehicle for consideration when this service involves the refrigerant in the motor vehicle air conditioner shall comply with 40 CFR 82 Subpart B, Servicing of Motor Vehicle Air Conditioners.

v. Pursuant to 40 CFR 82.166, all persons shall comply with the reporting and recordkeeping requirements of 40 CFR 82.166.

c. Asbestos Demolition and Renovation

i. Asbestos Fees. Pursuant to Section 9.13(a) of the Act, for any site for which the Owner or Operator must file an original 10-day notice of intent to renovate or

demolish pursuant to Condition 3.1(c)(ii) below and 40 CFR 61.145(b), the owner or operator shall pay to the IEPA with the filing of each 10-day notice a fee of $150.

ii. Pursuant to 40 CFR 61 Subpart M, Standard of Asbestos, prior to any demolition or renovation at this facility, the Permittee shall fulfill notification requirements of 40 CFR 61.145(b).

iii. Pursuant to 40 CFR 61.145(c), during demolition or renovation, the Permittee shall comply with the procedures for asbestos emission control established by 40 CFR 61.145(c).

d. Future Emission Standards

Pursuant to Section 39.5(15)(a) of the Act, this source shall comply with any new or revised applicable future standards of 40 CFR 60, 61, 62, or 63; or 35 IAC Subtitle B after the date issued of this permit. The Permittee shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by Condition 2.6(a). This permit may also have to be revised or reopened to address such new regulations in accordance to Condition 2.9.

2. Applicable Plans and Programs

Pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act, the Permittee shall comply with the following applicable requirements. These requirements are applicable to all emission units (including insignificant activities unless specified otherwise in this Section) at the source.

a. Fugitive PM Operating Program

Should this source become subject to 35 IAC 212.302, the Permittee shall prepare and operate under a Fugitive PM Operating Program consistent with 35 IAC 212.310 and submitted to the IEPA for its review. The Fugitive PM Operating Program shall be designed to significantly reduce fugitive particulate matter emissions, pursuant to 35 IAC 212.309(a). Any future Fugitive PM Operating Program made by the Permittee during the permit term is automatically incorporated by reference provided the Fugitive PM Operating Program is not expressly disapproved, in writing, by the IEPA within 30 days of receipt of the Fugitive PM Operating Program. In the event that the IEPA notifies the Permittee of a deficiency with any Fugitive PM Operating Program, the Permittee shall be required to revise and resubmit the Fugitive PM Operating Program within 30 days of receipt of notification to address the deficiency pursuant to Section 39.5(7)(a) of the Act.

b. PM_{10} Contingency Measure Plan

Should this source become subject to 35 IAC 212.700, then the Permittee shall prepare and operate under a PM_{10} Contingency Measure Plan reflecting the PM_{10} emission reductions as set forth in 35 IAC 212.701 and 212.703. The Permittee shall, within 90 days after the date this source becomes subject to 35 IAC 212.700, submit a request to modify this CAAPP permit in order to include a new, appropriate PM_{10} Contingency Measure Plan.

c. Episode Action Plan

i. Pursuant to 35 IAC 244.141, the Permittee shall have on file with the IEPA an Episode Action Plan for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The Episode Action Plan shall contain the information specified in 35 IAC 244.144.

ii. The Permittee shall immediately implement the appropriate steps described in the Episode Action Plan should an air pollution alert or emergency be declared, as

required by 35 IAC 244.169, or as may otherwise be required under 35 IAC 244, Appendix D.

iii. Pursuant to 35 IAC 244.143(d), if an operational change occurs at the source which invalidates the Episode Action Plan, a revised Episode Action Plan shall be submitted to the IEPA for review within 30 days of the change and is automatically incorporated by reference provided the revision is not expressly disapproved, in writing, by the IEPA within 30 days of receipt of the revision. In the event that the IEPA notifies the Permittee of a deficiency with any revision to the Episode Action Plan, the Permittee shall be required to revise and resubmit the Episode Action Plan within 30 days of receipt of notification to address the deficiency pursuant to Section 39.5(7)(a) of the Act.

iv. The Episode Action Plan, as submitted by the Permittee on September 26, 2012, is incorporated herein by reference. The document constitutes the formal Episode Action Plan required by 35 IAC 244.142, addressing the actions that will be implemented to reduce SO_2, PM10, NO_2, CO and VOM emissions from various emissions units in the event of a yellow alert, red alert or emergency issued under 35 IAC 244.161 through 244.165.

v. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep a copy of the Episode Action Plan, any amendments or revisions to the Episode Action Plan (as required by Condition 3.2(c)), and the Permittee shall also keep a record of activities completed according to the Episode Action Plan.

d. Risk Management Plan (RMP)

Should this stationary source, as defined in 40 CFR 68.3, become subject to the federal regulations for Chemical Accident Prevention in 40 CFR Part 68, then the Permittee shall submit a compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or submit a certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan, as part of the annual compliance certification required by Condition 2.6(a). This condition is imposed in this permit pursuant to 40 CFR 68.215(a)(2)(i) and (ii).

3. Title I Requirements

a. i. Construction Permit 11090046 Requirements [T1]

A. Pursuant to Construction Permit #11090046 and 40 CFR 52.21, the total emissions of greenhouse gasses from the source, combined, shall not exceed 19,000 tons per year, as CO_2e. [T1]

ii. Compliance Method (CO_2e Requirements)

Recordkeeping

A. Pursuant to Construction Permit #11090046, the Permittee shall keep records of annual emissions of CO_2e from all the engine test cells at the source, combined, in tons/year, with supporting calculations. Compliance with annual limit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (rolling 12 month average). [T1]

B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records of monthly and annual emissions of individual GHGs (CO_2, N_2O, CH_4, PFCs, HFCs, and SF_6) from all the engine test cells at the source, in tons/month and tons/year, with supporting calculations. Compliance with annual limit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (rolling 12 month average).

4. Synthetic Minor Limits

a. i. Hazardous Air Pollutant Requirements (HAP)

A. Pursuant to Construction Permit #11090046, individual HAP emissions from the source shall not exceed 1.0 tons/month and 5.0 tons/year. [T1R]

B. Pursuant to Construction Permit #11090046, total HAP emissions from the source shall not exceed 2.5 tons/month and 12.5 tons/year. [T1R]

ii. Compliance Method (HAP Requirements)

Testing

A. Pursuant to 35.9(7)(a) the Permittee shall perform testing, using Method 320 for total HAPs and Method 18 for individual HAPs (Benzene, Toluene, Xylene, Naphthalene, Formaldehyde, Acetaldehyde, and Acrolein), when the source meets any of the following conditions:

I. If in the previous calendar year, the source exceeded any of the production limitations in Condition 3.4(b)(i). The Permittee shall test the largest IC Engine with the largest contribution to individual and total HAP emissions. The testing shall be done within 180 days of the exceedance, or

II. If the Permittee conducts testing in accordance with Condition 4.1.2(d)(ii)(A), one test cell, with an engine that is most representative of the average operating engine size for that month plus the preceding 11 months (12 month rolling average) shall be tested.

B. Pursuant to 35.9(7)(a) the Permittee may choose to use other test methods other than Method 320 and Method 18 if the test methods have been pre-approved by the IEPA.

C. The Permittee shall comply with all the requirements of Section 7.1.

Recordkeeping

D. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of the individual and total HAP emissions from the source including supporting calculations (ton/month and ton/year). Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (rolling 12 month average).

b. i. Operational and Production Requirements

A. Pursuant to Construction Permit #11090046, the liquid and fuel usage at the source shall not exceed 121,000 gallons per month and 1,202,150 gallons per year, and the gaseous fuel usage at the source shall not exceed 9.0 million cubic feet (mmcf) per month and 90.0 mmcf per year, respectively. [T1]

ii. Compliance Method (Operational and Production Requirements)

Monitoring

A. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall operate, calibrate, and maintain a continuous monitoring device that measures and records the fuel usage of each type of fuel in each test cell. No engine test cell shall be operated without a continuous monitoring device for

measuring and recording fuel. The continuous monitoring devices shall be calibrated at least annually and prior to use after any maintenance, repair, or replacement work.

Recordkeeping

B. Pursuant to Construction Permit #11090046, the Permittee shall maintain records of fuel usage of the test cells by type of fuel, (gallons/month and gallons/year for liquid fuel, and mmcf/month and mmcf/year for gaseous fuel) Compliance with these annual fuel limits shall be determined from the sum of the data for the current month plus the preceding 11 months(rolling 12 month average).

C. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of the total heat content of each fuel fired in the engine test cells, with supporting calculations (mmBtu/month and mmBtu/year).

D. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records of all calibration and maintenance, repair, and replacement of monitoring equipment.

5. Reporting Requirements

The Permittee shall submit the following information pursuant to Section 39.5(7)(f) of the Act. Addresses are included in Attachment 3.

a. <u>Prompt Reporting</u>

i. A. Pursuant to Section 39.5(7)(f)(ii) of the Act, the Permittee shall promptly notify the IEPA, Air Compliance Section, within 30 days of deviations from applicable requirements as follows:

I. Requirements in Conditions 3.1(a)(i) and 3.1(d).

II. Requirements in Condition 3.2(c).

III. Requirements in Condition 3.3(a)(i).

IV. Requirements in Condition 3.4(a)(i) and 3.4(b)(i).

B. All such deviations shall be summarized and reported as part of the Semiannual Monitoring Report required by Condition 3.5(b).

ii. The Permittee shall notify the IEPA, Air Compliance Section, of all other deviations as part of the Semiannual Monitoring Report required by Condition 3.5(b).

iii. The deviation reports shall contain at a minimum the following information:

A. Date and time of the deviation.

B. Emission unit(s) and/or operation involved.

C. The duration of the event.

D. Probable cause of the deviation.

E. Corrective actions or preventative measures taken.

iv. All deviation reports required in this Permit shall be identified, summarized, and reported as part of the Semiannual Monitoring Report required by Condition 3.5(b).

b. Semiannual Reporting

i. Pursuant to Section 39.5(7)(f)(i) of the Act, the Permittee shall submit Semiannual Monitoring Reports to the IEPA, Air Compliance Section, summarizing required monitoring as part of the Compliance Methods in this Permit submitted every six months as follows, unless more frequent reporting is required in other parts of this permit.

Monitoring Period	Report Due Date
January through June	July 31
July through December	January 31

ii. The Semiannual Monitoring Report must be certified by a Responsible Official consistent with Condition 2.6(b).

c. Annual Emissions Reporting

Pursuant to 35 IAC Part 254, the Source shall submit an Annual Emission Report due by May 1 of the year following the calendar year in which the emissions took place. All records and calculations upon which the verified and reported data are based must be retained by the source.

Section 4 – Emission Unit Requirements
4.1 Engine Test Cells

1. Emission Units and Operations

Emission Units	*Pollutants Being Regulated*	*Original Construction Date*	*Modification/ Reconstruction Date*	*Air Pollution Control Devices or Measures*	*Monitoring Devices*
Test Cell #1 (750 max hp)	PM, SO_2, VOM, CO, NO_x	December 2009	N/A	None*	Fuel Usage Gauge
Test Cell #2 (3000 max hp)	PM, SO_2, VOM, CO, NO_x	December 2009	February 2012	None*	Fuel Usage Gauge
Test Cell #3 (3000 max hp)	PM, SO_2, VOM, CO, NO_x	December 2009	February 2012	None*	Fuel Usage Gauge
Test Cell #4 (4500 max hp)	PM, SO_2, VOM, CO, NO_x	December 2009	N/A	None*	Fuel Usage Gauge
Test Cell #5 (4500 max hp)	PM, SO_2, VOM, CO, NO_x	May 2010	February 2012	None*	Fuel Usage Gauge
Test Cell #6 (4000 max hp)	PM, SO_2, VOM, CO, NO_x	March 2010	February 2012	None*	Fuel Usage Gauge
Test Cell #7 (300 max hp)	PM, SO_2, VOM, CO, NO_x	May 2010	February 2012	None*	Fuel Usage Gauge
Test Cell #8 (3000 max hp)	PM, SO_2, VOM, CO, NO_x	February 2012	N/A	None*	Fuel Usage Gauge
Test Cell #9 (3000 max hp)	PM, SO_2, VOM, CO, NO_x	February 2012	N/A	None*	Fuel Usage Gauge

*Note: The engines may have TIER controls but the test cells are uncontrolled.

2. Applicable Requirements

For the emission units in Condition 4.1.1 above, the Permittee shall comply with the following applicable requirements pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act.

a. i. <u>Opacity Requirements</u>

A. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to Section 212.122.

ii. <u>Compliance Method (Opacity Requirements)</u>

Monitoring

A. Pursuant to Sections 39.5(7)(b) and (d) of the Act, at a minimum, the Permittee shall perform observations for opacity in accordance with Method 22 for visible emissions at least once for each engine being tested in each test cell. If visible emissions are observed, the Permittee shall take corrective action within 4 hours of such observation. Corrective action may include, but is not limited to, shut down of the equipment, and/or maintenance and repair. If corrective action was taken the Permittee shall perform a follow-up observation for visible emissions in accordance with Method 22, as referenced by 35 IAC 212.107. If visible emissions continue, then measurements of opacity in accordance with Method 9 and Section 7.1 shall be conducted immediately, but in no case longer than 16 hours upon completion of maintenance or repair activities, in accordance with Condition 2.4.

B. Pursuant to Section 39.5(7)(a) of the Act, the Permittee shall perform an observation for visible emissions in accordance with Method 9, as referenced

by 40 CFR 60 Appendix B, whenever testing in accordance with Condition 4.1.2 (d)(ii)(A) is conducted.

Recordkeeping

C. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records for each observation for opacity conducted. These records shall include, at a minimum: date and time the observation was performed, name(s) of observing personnel, identification of which equipment was observed, whether or not the equipment was running properly, the findings of the observation including the presence of any visible emissions, and a description of any corrective action taken including if the corrective action took place within 4 hours of the observation.

D. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records for all opacity measurements made in accordance with USEPA Method 9.

b. i. <u>Sulfur Dioxide Requirements (SO_2)</u>

A. Pursuant to 35 IAC 214.301, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.

ii. <u>Compliance Method (SO_2 Requirements)</u>

Testing

A. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall have the fuels that were used in the previous 6 month period analyzed for sulfur content under the following conditions:

I. At least twice each calendar year, and;

II. Upon request by the IEPA.

B. Pursuant to Section 39.5(7)(a) of the Act, the Permittee shall test for SO_2 emissions in accordance with Method 6, as referenced by 40 CFR 60 Appendix B, whenever testing in accordance with Condition 4.1.2 (d)(ii)(A) is conducted.

C. The Permittee shall comply with all the requirements of Section 7.1.

Monitoring

D. The periodic monitoring requirements sufficient to meet Section 39.5(7)(b)(i) of the Act are addressed by the operational and production requirements in Condition 4.1.2(f)(i)(B) and 4.1.2(f)(i)(C).

Recordkeeping

E. Pursuant to Construction Permit #11090046, the Permittee shall maintain records of the sulfur content of the liquid fuel, percent by weight, with supporting documentation. [T1]

F. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of the sulfur content of the gaseous fuel, percent by weight, with supporting documentation.

G. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of the fuel analysis.

c. i. Volatile Organic Material Requirements (VOM)

A. Pursuant to 35 IAC 215.301, no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission source, except if no odor nuisance exists, the limitation shall apply only to photochemically reactive material.

ii. Compliance Method (VOM Requirements)

Testing

A. Pursuant to Section 39.5(7)(a) of the Act, the Permittee shall test for VOM emissions in accordance with Method 18, as referenced by 40 CFR 60 Appendix B, whenever testing in accordance with Condition 4.1.2 (d)(ii)(A) is conducted.

B. The Permittee shall comply with all the requirements of Section 7.1.

Recordkeeping

C. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep the following records related to VOM emissions:

I. Hourly emissions of VOM from each engine test cell, in pounds/hour, based on the fuel usage from Condition 3.4(b)(ii)(B) and operating hours from Condition 4.1.2(f)(ii)(B), with supporting calculations.

II. Hourly emissions of VOM from all the engine test cells at the source, combined, in pounds/hour, based on the fuel usage from Condition 3.4(b)(ii)(B) and operating hours from Condition 4.1.2(f)(ii)(B), with supporting calculations.

III. Monthly and annual emissions of VOM from each engine test cell, in tons/month and tons/year (12 month rolling average), based on the fuel usage from Condition 3.4(b)(ii)(B) and operating hours from Condition 4.1.2(f)(ii)(B), with supporting calculations.

IV. Monthly and annual emissions of VOM from all the engine test cells at the source, combined, in tons/month and tons/year (12 month rolling average), based on the fuel usage from Condition 3.4(b)(ii)(B) and operating hours from Condition 4.1.2(f)(ii)(B), with supporting calculations.

d. i. Carbon Monoxide Requirements (CO)

A. Pursuant to Construction Permit #11090046, CO emissions from all the test cells combined shall not exceed 24.5 tons/month and 245.0 tons/year. [T1]

ii. Compliance Method (CO Requirements)

Testing

A. Pursuant to Section 39.5(7)(a) of the Act, when the actual emissions from the source exceeds 50 percent of the annual limit, in this case 125 tons/year, the Permittee shall test for CO emissions in accordance with Method 10B, as referenced by 40 CFR 60 Appendix B.

B. The Permittee shall comply with all the requirements of Section 7.1.

Recordkeeping

C. Pursuant to Construction Permit #11090046, the Permittee shall keep the following records related to CO emissions:

I. Monthly and annual emissions of CO from each engine test cell, in tons/month and tons/year (12 month rolling average), based on the fuel usage from Condition 3.4(b)(ii)(B) and operating hours from Condition 4.1.2(f)(ii)(B), with supporting calculations.

II. Monthly and annual emissions of CO from all the engine test cells at the source, combined, in tons/month and tons/year (12 month rolling average), based on the fuel usage from Condition 3.4(b)(ii)(B) and operating hours from Condition 4.1.2(f)(ii)(B), with supporting calculations. [T1]

e. i. Nitrogen Oxide Requirements (NO_x)

A. Pursuant to Construction Permit #11090046, NO_x emissions from all the test cells combined shall not exceed 18.0 tons/month and 180.0 tons/year. [T1]

ii. Compliance Method (NO_x Requirements)

Testing

A. Pursuant to Section 39.5(7)(a) of the Act, the Permittee shall test for NO_x emissions in accordance with Method 7, as referenced by 40 CFR 60 Appendix B, whenever testing in accordance with Condition 4.1.2 (d)(ii)(A) is conducted.

B. The Permittee shall comply with all the requirements of Section 7.1.

Recordkeeping

C. Pursuant to Construction Permit #11090046, the Permittee shall keep the following records related to NO_x emissions:

I. Monthly and annual emissions of NO_x from each engine test cell, in tons/month and tons/year (12 month rolling average), based on the fuel usage and operating hours from Condition 4.1.2(f)(ii)(B), with supporting calculations.

II. Monthly and annual emissions of NO_x from all the engine test cells at the source, combined, in tons/month and tons/year (12 month rolling average), based on the fuel usage from Condition 3.4(b)(ii)(B) and operating hours from Condition 4.1.2(f)(ii)(B), with supporting calculations. [T1]

f. i. Operational and Production Requirements

A. Pursuant to Construction Permit #10010029, the run times for Test Cells 5, 6, and 7 shall each not exceed 4,000 hours per year. Compliance with these annual limits shall be 12 month rolling average. [T1]

B. Pursuant to Section 39.5(7)(b) of the Act, ultra low sulfur diesel for non-road engines shall be the only liquid fuel fired by each engine test cell. Sulfur content of the ultra low sulfur diesel fuel shall be no greater than 15 ppm, pursuant to 40 CFR 80.510(c).

C. Pursuant to Section 39.5(7)(b) of the Act, pipeline quality natural gas shall be the only gas fuel fired by each engine test cell.

D. Pursuant to Construction Permit #12020018, any new stacks for the engine test cells shall satisfy good engineering practice, with a height that is at least as great as that specified by 40 CFR 51.100(ii)(2)(ii) or (3). [T1]

ii. Compliance Method (Operational and Production Requirements)

Recordkeeping

A. Pursuant to Construction Permit #11090046, the Permittee shall maintain records of individual operating hours for each of the test cells. [T1]

B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of each type of fuel fired by each engine test cell.

C. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of new stack design specifications.

g. i. Work Practice Requirements

A. Pursuant to Section 39.5(7)(a) of the Act, at all times the Permittee shall, to the extent practicable, maintain and operate the engine test cells and associated control equipment in a manner consistent with good air pollution control practices for minimizing emissions.

ii. Compliance Method (Work Practice Requirements)

Monitoring

A. Pursuant to Section 39.5(7)(d) of the Act, the Permittee shall perform an annual inspection on each test cell which shall include the following:

I. Instrumentation operability and accuracy, and

II. Test cell integrity, including:

1. Test cell enclosures,

2. Stacks, and

3. Mufflers

Recordkeeping

B. Pursuant to Section 39.5(7)(e) of the Act, the Permittee shall maintain a record of each annual inspection with findings and any actions that result.

C. Pursuant to Section 39.5(7)(a) of the Act, each time a Tier level control is removed during testing of an engine, the Permittee shall keep the following records:

I. Date and time the control was removed.

II. Name and specifications of the control that was removed.

III. Length of time the control was removed.

IV. Reason the control was removed.

V. Results of the impact on emissions of all pollutants, in tons per month, with supporting calculations and documentation.

3. Non-Applicability Determinations

a. The engine test cells are not subject to the New Source Performance Standards (NSPS) for Stationary Compression Ignition Internal Combustion Engines, 40 CFR 60 Subpart IIII, because the provisions of these rules are not applicable to engines being tested at engine test cell/stands, pursuant to 40 CFR 60.4200(b).

b. The engine test cells are not subject to the New Source Performance Standards (NSPS) for Stationary Spark Ignition Combustion Engines, 40 CFR 60 Subpart JJJJ, because the provisions of these rules are not applicable to engines being tested at engine test cell/stands, pursuant 40 CFR 60.4230(b).

c. The engine test cells are not subject to National Emission Standards for Hazardous Air Pollutants (NESHAP) for Engine Test Cells/Stands, 40 CFR 63 Subpart PPPPP, because the source is not a major source of HAP emissions, as limited by Condition 3.4(a).

d. The engine test cells are not subject to the National Emission Standards for Hazardous Air Pollution (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE), 40 CFR 63 Subpart ZZZZ, because the RICE engines are being tested at a RICE test cell/stand, pursuant to 40 CFR 63.6585.

e. The engine test cells are not subject to 35 IAC 212.206, because the engines tested are not fuel combustion emission units as defined at 35 IAC 211.2470.

f. The engine test cells are not subject to 35 IAC 212.321 or 35 IAC 212.322, due to the unique nature of such units, a process weight rate cannot be set so that such rules cannot reasonably be applied, pursuant to 35 IAC 212.323.

g. The engine test cells are not subject to 35 IAC 214.122, because the engines tested are not fuel combustion emission units as defined by 35 IAC 211.2470.

h. The engine test cells are not subject to 35 IAC 216.121, because the engines tested are not fuel combustion emission units as defined by 35 IAC 211.2470.

i. The engine test cells are not subject to 35 IAC 217.141, because the engines tested are not fuel combustion emission units as defined by 35 IAC 211.2470.

j. The engine test cells are not subject to 35 IAC 217 Subpart Q because the engines tested are used for research or for the purposes of performance verification or testing, pursuant to 35 IAC 217.386(b)(2).

k. The engine test cells are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for all pollutants and applicable requirements, because the engine test cells do not use an add-on control device to achieve compliance with an emission limitation or standard.

4. Other Requirements

As of the date of issuance of this permit, there are no other requirements that need to be included in this Condition.

5. Reporting Requirements

The Permittee shall submit the following information pursuant to Section 39.5(7)(f) of the Act. Addresses are included in Attachment 3.

a. <u>Prompt Reporting</u>

i. A. Pursuant to Section 39.5(7)(f)(ii) of the Act, the Permittee shall promptly notify the IEPA, Air Compliance Section, within 30 days of deviations from

applicable requirements as follows unless a different period is specified by a particular permit provision, i.e., NSPS or NESHAP requirement:

I. Requirements in Conditions 4.1.2(a)(i), 4.1.2(b)(i), 4.1.2(c)(i), 4.1.2(d)(i), 4.1.2(e)(i), and 4.1.2(f)(i).

B. All such deviations shall be summarized and reported as part of the Semiannual Monitoring Report required by Condition 3.5(b).

ii. The Permittee shall notify the IEPA, Air Compliance Section, of all other deviations as part of the Semiannual Monitoring Report required by Condition 3.5(b).

iii. The deviation reports shall contain at a minimum the following information:

A. Date and time of the deviation.

B. Emission unit(s) and/or operation involved.

C. The duration of the event.

D. Probable cause of the deviation.

E. Corrective actions or preventative measures taken.

b. <u>Other Reporting</u>

i. The Permittee shall submit to the IEPA Compliance Section a notification each time the actual fuel usage, CO emissions, or NO_x emissions exceeds 20% of the monthly emission limits in Conditions 3.4(b)(i)(A), 4.1.2(d)(i)(A), or 4.1.2(e)(i)(A), respectively, within 5 days of the exceedance.

ii. This report shall include a copy of the records required by Condition 4.1.2(g)(ii)(C).

Section 5 – Additional Title I Requirements

This Section is reserved for Title I requirements not specified in Sections 3 or 4. As of the date of issuance of this permit, there are no Title I requirements that need to be separately addressed in this Section.

Section 6 – Insignificant Activities Requirements

1. Insignificant Activities Subject to Specific Regulations

This condition is reserved for insignificant activities as defined in 35 IAC 201.210 and 201.211 which are subject to specific standards promulgated pursuant Sections 111, 112, 165, or 173 of the Clean Air Act, see Sections 9.1(d) and 39.5 (6)(a) of the Act. As of the date of issuance of this permit, there are no such insignificant activities present at the source.

2. Insignificant Activities in 35 IAC 201.210(a)

In addition to any insignificant activities identified in Condition 6.1, the following additional activities at the source constitute insignificant activities pursuant to 35 IAC 201.210 and 201.211:

Insignificant Activity	*Number of Units*	*Insignificant Activity Category*
Direct combustion units used for comfort heating and fuel combustion emission units as further detailed in 35 IAC 201.210(a)(4).	15	35 IAC 201.210(a)(4)
Storage tanks of virgin or rerefined distillate oil, hydrocarbon condensate from natural gas pipeline or storage systems, lubricating oil, or residual fuel oil.	3	35 IAC 201.210(a)(11)

3. Insignificant Activities in 35 IAC 201.210(b)

Pursuant to 35 IAC 201.210, the source has identified insignificant activities as listed in 35 IAC 201.210(b)(1) through (28) as being present at the source. The source is not required to individually list the activities.

4. Applicable Requirements

Insignificant activities in Conditions 6.1 and 6.2 are subject to the following general regulatory limits notwithstanding status as insignificant activities. The Permittee shall comply with the following requirements, as applicable:

a. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 IAC 212.122, except as provided in 35 IAC 212.123(b).

b. Pursuant to 35 IAC 214.301, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2,000 ppm, except as provided in 35 IAC Part 214.

c. Pursuant to 35 IAC 215.301, no person shall cause or allow the discharge of more than 8 lbs/hr of organic material into the atmosphere from any emission source, except as provided in 35 IAC 215.302, 215.303, 215.304 and the following exception: If no odor nuisance exists the limitation of 35 IAC 215 Subpart K shall apply only to photochemically reactive material.

d. Pursuant to 35 IAC 215.122(b), no person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 250 gal, unless such tank is equipped with a permanent submerged loading pipe, submerged fill, or an equivalent device approved by the IEPA according to 35 IAC Part 201 or unless such tank is a pressure tank as described in 35 IAC 215.121(a) or is fitted with a recovery system as described in 35 IAC 215.121(b)(2). Exception as provided in 35 IAC 215.122(c): If no odor nuisance exists the limitations of 35 IAC 215.122 shall only apply to the loading of volatile organic liquid with a vapor pressure of 2.5 psia or greater at 70°F.

5. Compliance Method

Pursuant to Section 39.5(7)(b) of the Act, the source shall maintain records of the following items for the insignificant activities in Conditions 6.1 and 6.2:

a. List of all insignificant activities, including insignificant activities added as specified in Condition 6.6, the categories the insignificant activities fall under, and supporting calculations as needed.

b. Potential to emit emission calculations before any air pollution control device for each insignificant activity.

6. Notification Requirements for Insignificant Activities

The source shall notify the IEPA accordingly to the addition of insignificant activities:

a. <u>Notification 7 Days in Advance</u>

i. Pursuant to 35 IAC 201.212(b), for the addition of an insignificant activity that would be categorized under 35 IAC 201.210(a)(1) and 201.211 and is not currently identified in Conditions 6.1 or 6.2, a notification to the IEPA Permit Section 7 days in advance of the addition of the insignificant activity is required. Addresses are included in Attachment 3. The notification shall include the following pursuant to 35 IAC 201.211(b):

A. A description of the emission unit including the function and expected operating schedule of the unit.

B. A description of any air pollution control equipment or control measures associated with the emission unit.

C. The emissions of regulated air pollutants in lb/hr and ton/yr.

D. The means by which emissions were determined or estimated.

E. The estimated number of such emission units at the source.

F. Other information upon which the applicant relies to support treatment of such emission unit as an insignificant activity.

ii. Pursuant to 35 IAC 201.212(b), for the addition of an insignificant activity that would be categorized under 35 IAC 201.210(a)(2) through 201.210(a)(18) and is not currently identified in Conditions 6.1 or 6.2, a notification to the IEPA Permit Section 7 days in advance of the addition of the insignificant activity is required. Addresses are included in Attachment 3.

iii. Pursuant to Sections 39.5(12)(a)(i)(b) and 39.5(12)(b)(iii) of the Act, the permit shield described in Section 39.5(7)(j) of the Act (see Condition 2.7) shall not apply to any addition of an insignificant activity noted above.

b. <u>Notification Required at Renewal</u>

Pursuant to 35 IAC 201.212(a) and 35 IAC 201.146(kkk), for the addition of an insignificant activity that would be categorized under 35 IAC 201.210(a) and is currently identified in Conditions 6.1 or 6.2, a notification is not required until the renewal of this permit.

c. Notification Not Required

Pursuant to 35 IAC 201.212(c) and 35 IAC 201.146(kkk), for the addition of an insignificant activity that would be categorized under 35 IAC 201.210(b) as describe in Condition 6.3, a notification is not required.

Section 7 – Other Requirements

1. Testing

a. Pursuant to Section 39.5(7)(a) of the Act, a written test protocol shall be submitted at least sixty (60) days prior to the actual date of testing, unless it is required otherwise in applicable state or federal statutes. The IEPA may at the discretion of the Compliance Section Manager (or designee) accept protocol less than 60 days prior to testing provided it does not interfere with the IEPA's ability to review and comment on the protocol and does not deviate from the applicable state or federal statutes. The protocol shall be submitted to the IEPA, Compliance Section and IEPA, Stack Test Specialist for its review. Addresses are included in Attachment 3. This protocol shall describe the specific procedures for testing, including as a minimum:

i. The name and identification of the emission unit(s) being tested.

ii. Purpose of the test, i.e., permit condition requirement, IEPA or USEPA requesting test.

iii. The person(s) who will be performing sampling and analysis and their experience with similar tests.

iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the emission unit and any control equipment will be determined.

v. The specific determinations of emissions and operation which are intended to be made, including sampling and monitoring locations.

vi. The test method(s) that will be used, with the specific analysis method, if the method can be used with different analysis methods. Include if emission tests averaging of 35 IAC 283 will be used.

vii. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with detailed justification. This shall be included as a waiver of the test procedures. If a waiver has already been obtained by the IEPA or USEPA, then the waiver shall be submitted.

viii. Any proposed use of an alternative test method, with detailed justification. This shall be included as a waiver of the test procedures. If a waiver has already been obtained by the IEPA or USEPA, then the waiver shall be submitted.

ix. Sampling of materials, QA/QC procedures, inspections, etc.

b. The IEPA, Compliance Section shall be notified prior to these tests to enable the IEPA to observe these tests pursuant to Section 39.7(a) of the Act as follows:

i. Notification of the expected date of testing shall be submitted in writing a minimum of thirty (30) days prior to the expected test date, unless it is required otherwise in applicable state or federal statutes.

ii. Notification of the actual date and expected time of testing shall be submitted in writing a minimum of five (5) working days prior to the actual date of the test. The IEPA may at its discretion of the Compliance Section Manager (or designee) accept notifications with shorter advance notice provided such notifications will not interfere with the IEPA's ability to observe testing.

c. Copies of the Final Report(s) for these tests shall be submitted to the IEPA, Compliance Section within fourteen (14) days after the test results are compiled and finalized but no later than ninety (90) days after completion of the test, unless it is required

otherwise in applicable state or federal statutes or the IEPA may at the discretion of the Compliance Section Manager (or designee) an alternative date is agreed upon in advance pursuant to Section 39.7(a) of the Act. The Final Report shall include as a minimum:

i. General information including emission unit(s) tested.

ii. A summary of results.

iii. Discussion of conditions during each test run (malfunction/breakdown, startup/shutdown, abnormal processing, etc.).

iv. Description of test method(s), including description of sampling points, sampling train, analysis equipment, and test schedule.

v. Detailed description of test conditions, including:

A. Process information, i.e., mode(s) of operation, process rate, e.g. fuel or raw material consumption.

B. Control equipment information, i.e., equipment condition and operating parameters during testing.

C. A discussion of any preparatory actions taken, i.e., inspections, maintenance and repair.

vi. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.

vii. An explanation of any discrepancies among individual tests or anomalous data.

viii. Results of the sampling of materials, QA/QC procedures, inspections, etc.

ix. Discussion of whether protocol was followed and description of any changes to the protocol if any occurred.

x. Demonstration of compliance showing whether test results are in compliance with applicable state or federal statutes.

d. Copies of all test reports and other test related documentation shall be kept on site as required by Condition 2.5(b) pursuant to Section 39.5(7)(e)(ii) of the Act.

Section 8 – State Only Requirements

1. Permitted Emissions for Fees

The annual emissions from the source for purposes of "Duties to Pay Fees" of Condition 2.3(e), not considering insignificant activities as addressed by Section 6, shall not exceed the following limitations. The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. The Permittee shall maintain records with supporting calculations of how the annual emissions for fee purposes were calculated. This Condition is set for the purpose of establishing fees and is not federally enforceable. See Section 39.5(18) of the Act.

Pollutant		*Tons/Year*
Volatile Organic Material	(VOM)	10.0
Sulfur Dioxide	(SO_2)	1.5
Particulate Matter	(PM)	2.5
Nitrogen Oxides	(NO_x)	155.3
HAP, not included in VOM or PM	(HAP)	---
Total		198.5

Attachment 1 – List of Emission Units at This Source

Section	*Emission Units*	*Description*
4.1	Test Cell #1	Test cell for heavy duty off road engines operating with diesel and natural gas with maximum capacity of 750 horsepower.
4.1	Test Cell #2	Test cell for heavy duty off road engines operating with diesel with maximum capacity of 3000 horsepower.
4.1	Test Cell #3	Test cell for heavy duty off road engines operating with diesel with maximum capacity of 3000 horsepower.
4.1	Test Cell #4	Test cell for heavy duty off road engines operating with diesel and natural gas with maximum capacity of 4500 horsepower.
4.1	Test Cell #5	Test cell for heavy duty off road engines operating with diesel with maximum capacity of 4500 horsepower.
4.1	Test Cell #6	Test cell for heavy duty off road engines operating with diesel and natural gas with maximum capacity of 4000 horsepower.
4.1	Test Cell #7	Test cell for heavy duty off road engines operating with diesel with maximum capacity of 300 horsepower.
4.1	Test Cell #8	Test cell for heavy duty off road engines operating with diesel and natural gas with maximum capacity of 3000 horsepower.
4.1	Test Cell #9	Test cell for heavy duty off road engines operating with diesel and natural gas with maximum capacity of 3000 horsepower.

Attachment 2 - Acronyms and Abbreviations

acfm	Actual cubic feet per minute
ACMA	Alternative Compliance Market Account
Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
ATU	Allotment trading unit
BACT	Best Available Control Technology
BAT	Best Available Technology
BTU	British Thermal Units
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAIR	Clean Air Interstate Rule
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CISWI	Commercial Industrial Solid Waste Incinerator
CO	Carbon monoxide
CO_2	Carbon dioxide
COMS	Continuous Opacity Monitoring System
CPMS	Continuous Parameter Monitoring System
dscf	Dry standard cubic foot
dscm	Dry standard cubic meter
EAF	Electric arc furnace
ERMS	Emissions Reduction Market System
°F	Degrees Fahrenheit
GHG	Green house gas
gr	Grains
HAP	Hazardous air pollutant
Hg	Mercury
HMIWI	Hospital medical infectious waste incinerator
HP	Horsepower
hr	Hour
H_2S	Hydrogen sulfide
I.D. No.	Identification number of source, assigned by IEPA
IAC	Illinois Administrative Code
ILCS	Illinois Compiled Statutes
IEPA	Illinois Environmental Protection Agency
KW	Kilowatts
LAER	Lowest Achievable Emission Rate
lb	Pound

m	Meter
MACT	Maximum Achievable Control Technology
mm	Million
mon	Month
MSDS	Material Safety Data Sheet
MSSCAM	Major Stationary Sources Construction and Modification (Non-attainment New Source Review)
MW	Megawatts
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_x	Nitrogen oxides
NSPS	New Source Performance Standards
NSR	New Source Review
PM	Particulate matter
PM_{10}	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
$PM_{2.5}$	Particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 microns as measured by applicable test or monitoring methods
ppm	Parts per million
ppmv	Parts per million by volume
PSD	Prevention of Significant Deterioration
PSEU	Pollutant-Specific Emission Unit
psia	Pounds per square inch absolute
PTE	Potential to emit
RACT	Reasonable Available Control Technology
RMP	Risk Management Plan
scf	Standard cubic feet
SCR	Selective catalytic reduction
SIP	State Implementation Plan
SO_2	Sulfur dioxide
T1	Title I - identifies Title I conditions that have been carried over from an existing permit
T1N	Title I New - identifies Title I conditions that are being established in this permit
T1R	Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
VOM	Volatile organic material

Attachment 3 - Contact and Reporting Addresses

IEPA Compliance Section	Illinois EPA, Bureau of Air Compliance & Enforcement Section (MC 40) 1021 North Grand Avenue East P.O. Box 19276 Springfield, Illinois 62794-9276 Phone No.: 217/782-2113
IEPA Stack Test Specialist	Illinois EPA, Bureau of Air Compliance Section Source Monitoring - Third Floor 9511 Harrison Street Des Plaines, Illinois 60016 Phone No.: 847/294-4000
IEPA Air Quality Planning Section	Illinois EPA, Bureau of Air Air Quality Planning Section (MC 39) 1021 North Grand Avenue East P.O. Box 19276 Springfield, Illinois 62794-9276 Phone No.: 217/782-2113
IEPA Air Regional Field Operations Regional Office #2	Illinois EPA, Bureau of Air Regional Office #2 5415 North University Peoria, Illinois 61614 Phone No.: 309/693-5462
IEPA Permit Section	Illinois EPA, Bureau of Air Permit Section (MC 11) 1021 North Grand Avenue East P.O. Box 19506 Springfield, Illinois 62794-9506 Phone No.: 217/785-1705
USEPA Region 5 - Air Branch	USEPA (AR - 17J) Air and Radiation Division 77 West Jackson Boulevard Chicago, Illinois 60604 Phone No.: 312/353-2000

Attachment 4 - Example Certification by a Responsible Official

SIGNATURE BLOCK	
NOTE: THIS CERTIFICATION MUST BE SIGNED BY A RESPONSIBLE OFFICIAL. APPLICATIONS WITHOUT A SIGNED CERTIFICATION WILL BE DEEMED AS INCOMPLETE.	
I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION CONTAINED IN THIS APPLICATION ARE TRUE, ACCURATE AND COMPLETE. ANY PERSON WHO KNOWINGLY MAKES A FALSE, FICTITIOUS, OR FRAUDULENT MATERIAL STATEMENT, ORALLY OR IN WRITING, TO THE ILLINOIS EPA COMMITS A CLASS 4 FELONY. A SECOND OR SUBSEQUENT OFFENSE AFTER CONVICTION IS A CLASS 3 FELONY. (415 ILCS 5/44(H))	
AUTHORIZED SIGNATURE:	
BY: _____	_____
AUTHORIZED SIGNATURE	TITLE OF SIGNATORY
_____	_____ / _____ / _____
TYPED OR PRINTED NAME OF SIGNATORY	DATE