ILLINOIS POLLUTION CONTROL BOARD
June 17, 2013

IN THE MATTER OF:)
)
VAPOR RECOVERY RULES:)   R13-18
AMENDMENTS TO 35 ILL. ADM. CODE   )   (Rulemaking - Air)
PARTS 201, 218, and 219   )

HEARING OFFICER ORDER

This order reiterates the rulemaking's public comment deadline, designates two additional hearing exhibits, and poses questions for the Illinois Environmental Protection Agency (IEPA) to address in public comment.

Public Comment Deadline

The second hearing in this rulemaking was held in Chicago on June 5, 2013. The hearing's transcript was filed on June 12, 2013, and is available through the Clerk's Office On-Line (COOL) on the Board's website at www.ipcb.state.il.us. At the conclusion of the second hearing, a deadline for filing public comments was established. Any person who wishes to file a public comment must file the comment with the Clerk of the Board no later than July 8, 2013.

The "mailbox rule" (35 Ill. Adm. Code 101.300(b)(2)) does not apply to this filing. Therefore, the Clerk must *receive* the public comment by 4:30 p.m. on Monday, July 8, 2013. Public comments may be filed through COOL. Any questions about electronic filing through COOL should be directed to the Clerk's Office at (312) 814-3629. Public comments filed with the Clerk must also be served on those persons on the R13-18 service list, which is available on COOL.

Hearing Exhibits

Attachment A to this order is a list of hearing exhibits for the rulemaking. Exhibit 6 was provided by IEPA at the second hearing and consists of links to two websites regarding gasoline dispenser training and certification. In the interest of a complete record, the screen shot for each of the two websites identified in Exhibit 6 has been printed out by the Board's Technical Unit. The two screen shots are designated as Exhibit 7 and attached to this order as Attachment B.

In addition, the Technical Support Document (TSD) for IEPA's rulemaking proposal, filed March 18, 2013, includes a compact disc (CD) of the Motor Vehicle Emission Simulator (MOVES2010b) "input and output files [IEPA] used in its analysis." TSD at 7. The Board's Technical Unit has printed out the MOVES2010b run specifications from the CD for Cook County in the years 2007, 2014, and 2020. For ease of public access, that print out is designated as

Exhibit 8 and attached to this order as Attachment C.

Questions

IEPA is directed to respond in its public comment to the questions below.

1. The Chicago nonattainment area (NAA) consists of the Counties of "Cook, DuPage, Kane, Lake, McHenry, Will, Grundy (townships of Aux Sable and Goose Lake only), and Kendall (Oswego township only)." IEPA Statement of Reasons (SOR) at 12 (filed March 18, 2013). When the run specifications on the TSD's CD are opened in MOVES2010b, each one displays the selection "ILLINOIS – Cook County" under "Geographic Bounds." *See* Attachment C of this order.

    A. Does Figure 1 of the TSD ("ORVR Alone vs. Stage II + ORVR") reflect the results of MOVES2010b runs for the entire Chicago NAA, Cook County only, or some other subdivision of the Chicago NAA?[1] *See* TSD at 10; SOR at 13-14.

    B. If Figure 1 of the TSD reflects the results of MOVES2010b runs for only a subdivision of the Chicago NAA (*e.g.*, Cook and DuPage Counties), please elaborate upon the following:

        i.   IEPA's reasoning for not running the model for the entire Chicago NAA;

        ii.   IEPA's reasoning for considering the model runs conducted to be adequate support for the Stage II cut-off date of January 1, 2014 (Section 218.586(d)) and the decommissioning timeframe of 2014 through 2016 (Section 218.586(i)(1)); and

        iii. Whether the emissions reduction benefits in tons per day presented in Figure 1 beginning in 2014 would be comparatively greater if the model were run for the entire Chicago NAA.

2. When the run specifications on the TSD's CD are opened in MOVES2010b, each one displays the selections "July" and "Weekdays" under "Time Spans." *See* Attachment C of this order. Please elaborate upon the following:

    A. IEPA's reasoning for modeling July instead of another month or the entire year; and

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[1] "ORVR" is short for "on-board refueling vapor recovery."

B.   IEPA's reasoning for modeling weekdays instead of also selecting weekends.

IT IS SO ORDERED.

Richard R. McGill, Jr.
Hearing Officer
Illinois Pollution Control Board
100 West Randolph Street, Suite 11-500
Chicago, Illinois 60601
(312) 814-6983
richard.mcgill@illinois.gov

Attachment A

ILLINOIS POLLUTION CONTROL BOARD
June 17, 2013

IN THE MATTER OF:	)
	)
VAPOR RECOVERY RULES:	) R13-18
AMENDMENTS TO 35 ILL. ADM. CODE	) (Rulemaking - Air)
PARTS 201, 218, and 219	)

EXHIBIT LIST

First Hearing: May 8, 2013, Springfield

Exhibit 1: Pre-filed Testimony of IEPA's Darwin Burkhart for First Hearing

Exhibit 2: Pre-filed Testimony of IEPA's Ross Cooper for First Hearing

Exhibit 3: "Motor Vehicle Emission Simulator (MOVES)," User Guide for MOVES2010b, USEPA, Assessment and Standards Division, Office of Transportation and Air Quality, EPA-420-B-12-001b (June 2012)

Second Hearing: June 5, 2013, Chicago

Exhibit 4: Pre-filed Testimony of IEPA's Darwin Burkhart for Second Hearing

Exhibit 5: Pre-filed Testimony of IEPA's Chuck Gebhardt for Second Hearing

Exhibit 6: Links to Two Websites for "Selected Gasoline Dispenser Training and Certification Courses"

By Hearing Officer Order Issued on June 13, 2013

Exhibit 7: Screen Shots for the Two Websites Identified in Exhibit 6

Exhibit 8: Run Specifications, Cook County, Years 2007, 2014, and 2020, Motor Vehicle Emission Simulator (MOVES2010b), Printed through MOVES2010b from Attachment B (Compact Disc) to IEPA's Technical Support Document Filed on March 18, 2013

Attachment B

Wayne
A GE Energy Business

Choose Language

English   GO

| About Us ▼ | Products ▼ | Aftermarket Services ▼ | Support and Literature ▼ | News and Events | Contact Us ▼ | SEARCH |

Home > Aftermarket Services > Technical Training

Aftermarket Services

WAYNE GENUINE PARTS

TOKHEIM GENUINE PARTS

AUTHORIZED SERVICE

CONTRACT SERVICES

HELP DESK

TECHNICAL TRAINING

NETWORK OPERATIONS CENTER (NOC)

Technical Training

Putting knowledge behind our equipment

Wayne's instructor-led and web-based training classes provide our service network technicians with up-to-date information so they can keep your site running. Our skilled instructors and thorough training content deliver high quality technical training. The courses encompass all levels of our product lines and include best practices giving technicians the practical knowledge they need to help deliver the best service possible in the field. Wayne technical training keeps technicians informed of the latest technical advances and regulatory developments.

Sign up for Wayne Technical Training classes

Locate Distributor

Find a distributor near you!

SELECT REGION

- Region -   GO

Sign up for more information about this Wayne product!

*required fields

First name*

Last name*

E-mail*

Business

✓ Yes, please keep me up-to-date from Wayne!

KEEP ME UPDATED

| Regional Availability | More Information |

Locations | Trainers | Benefits

Locations

Austin, TX

::: **North America**

Exh. 7 R13-18
6/17/13

GILBARCO VEEDER-ROOT
Technology with a human touch.

Extranet | Distributor & Service Locator

Worldwide Websites

Search

GO

PRODUCTS | ABOUT | NEWS | SUPPORT | PARTNERS | CONTACT US

Home · Support

GENUINE GILBARCO PARTS

> PASSPORT TRAINING & SUPPORT

APPROVALS & CERTIFICATIONS

TECHNICAL DOCUMENTS

∨ NORTH AMERICAN TECHNICAL TRAINING

Gasboy

Gilbarco Veeder-Root

Red Jacket

Veeder-Root

GRAPHICS

FMS ONLINE

SPARE PARTS

NORTH AMERICAN TECHNICAL TRAINING

Gilbarco Veeder-Root provides a wide range of expert resources to ensure outstanding field support for you.

We have an extensive selection of classes, certified trainers, and virtual and traditional documentation.

Our training combines hands-on real world exercises, experienced trainers and award winning technical training materials.

Take a look at our investment in service, and let us know how we can help.

Online Registration Links:

- Training Course Order Form
- Certified Trainer Matrix - contact information
- Contact Us!

Product Categories

Fuel Dispensers | Dispenser | Point of Sale (POS) Systems | FlexPay Payment Systems | Forecourt Merchandising | Remote & Store Site Management | Fuel Service Providers | Fuel Management

contact | careers | privacy | legal | sitemap

Internet | Protected Mode: Off

Attachment C

EXHIBIT 8

Docket R13-18, *Vapor Recovery Rules: Amendments to*
35 Ill. Adm. Code Parts 201, 218, and 219

Run Specifications
Cook County
Years 2007, 2014, and 2020
Motor Vehicle Emission Simulator (MOVES2010b)

Printed through MOVES2010b
From Attachment B (Compact Disc) to
IEPA's Technical Support Document
Filed on March 18, 2013

Exh. 8 R13-18
6/17/13 *KMM*

EPA MOVES RunSpec File Name:
    D:\Run Specs\CNAA2007_StageII.mrs

Description:
2007 CNAA - Stage II

Domain/Scale: County
Calculation Type: Inventory

Time Spans:
    Aggregate By: Hour
    Years:
        2007

    Months:
        July
    Days:
        Weekdays
    Hours:
        Begin Hour: 00:00 - 00:59
        End Hour: 23:00 - 23:59

Geographic Bounds:
    COUNTY geography
    Selection: ILLINOIS - Cook County

On Road Vehicle Equipment:
    Diesel Fuel - Combination Long-haul Truck
    Diesel Fuel - Combination Short-haul Truck
    Diesel Fuel - Intercity Bus
    Diesel Fuel - Light Commercial Truck
    Diesel Fuel - Motor Home
    Diesel Fuel - Passenger Car
    Diesel Fuel - Passenger Truck
    Diesel Fuel - Refuse Truck
    Diesel Fuel - School Bus
    Diesel Fuel - Single Unit Long-haul Truck
    Diesel Fuel - Single Unit Short-haul Truck

```
Diesel Fuel - Transit Bus
Gasoline - Combination Short-haul Truck
Gasoline - Light Commercial Truck
Gasoline - Motor Home
Gasoline - Motorcycle
Gasoline - Passenger Car
Gasoline - Passenger Truck
Gasoline - Refuse Truck
Gasoline - School Bus
Gasoline - Single Unit Long-haul Truck
Gasoline - Single Unit Short-haul Truck
Gasoline - Transit Bus
```

Road Types:
```
Off-Network
Rural Restricted Access
Rural Unrestricted Access
Urban Restricted Access
Urban Unrestricted Access
```

Pollutants And Processes:
```
Running Exhaust Ammonia (NH3)
Start Exhaust Ammonia (NH3)
Crankcase Running Exhaust Ammonia (NH3)
Crankcase Start Exhaust Ammonia (NH3)
Crankcase Extended Idle Exhaust Ammonia (NH3)
Extended Idle Exhaust Ammonia (NH3)
Running Exhaust Atmospheric CO2
Start Exhaust Atmospheric CO2
Running Exhaust CO2 Equivalent
Start Exhaust CO2 Equivalent
Running Exhaust Carbon Monoxide (CO)
Start Exhaust Carbon Monoxide (CO)
Crankcase Running Exhaust Carbon Monoxide (CO)
Crankcase Start Exhaust Carbon Monoxide (CO)
Crankcase Extended Idle Exhaust Carbon Monoxide (CO)
Extended Idle Exhaust Carbon Monoxide (CO)
Running Exhaust Methane (CH4)
```

Start Exhaust Methane (CH4)
Crankcase Running Exhaust Methane (CH4)
Crankcase Start Exhaust Methane (CH4)
Crankcase Extended Idle Exhaust Methane (CH4)
Refueling Displacement Vapor Loss Methane (CH4)
Refueling Spillage Loss Methane (CH4)
Extended Idle Exhaust Methane (CH4)
Running Exhaust Nitrogen Dioxide (NO2)
Start Exhaust Nitrogen Dioxide (NO2)
Crankcase Running Exhaust Nitrogen Dioxide (NO2)
Crankcase Start Exhaust Nitrogen Dioxide (NO2)
Crankcase Extended Idle Exhaust Nitrogen Dioxide (NO2)
Extended Idle Exhaust Nitrogen Dioxide (NO2)
Running Exhaust Non-Methane Hydrocarbons
Start Exhaust Non-Methane Hydrocarbons
Evap Fuel Vapor Venting Non-Methane Hydrocarbons
Evap Fuel Leaks Non-Methane Hydrocarbons
Crankcase Running Exhaust Non-Methane Hydrocarbons
Crankcase Start Exhaust Non-Methane Hydrocarbons
Crankcase Extended Idle Exhaust Non-Methane Hydrocarbons
Refueling Displacement Vapor Loss Non-Methane Hydrocarbons
Refueling Spillage Loss Non-Methane Hydrocarbons
Extended Idle Exhaust Non-Methane Hydrocarbons
Running Exhaust Oxides of Nitrogen (NOx)
Start Exhaust Oxides of Nitrogen (NOx)
Crankcase Running Exhaust Oxides of Nitrogen (NOx)
Crankcase Start Exhaust Oxides of Nitrogen (NOx)
Crankcase Extended Idle Exhaust Oxides of Nitrogen (NOx)
Extended Idle Exhaust Oxides of Nitrogen (NOx)
Running Exhaust Petroleum Energy Consumption
Start Exhaust Petroleum Energy Consumption
Extended Idle Exhaust Petroleum Energy Consumption
Running Exhaust Primary Exhaust PM10 - Total
Start Exhaust Primary Exhaust PM10 - Total
Crankcase Running Exhaust Primary Exhaust PM10 - Total
Crankcase Start Exhaust Primary Exhaust PM10 - Total
Crankcase Extended Idle Exhaust Primary Exhaust PM10 - Total
Extended Idle Exhaust Primary Exhaust PM10 - Total

Running Exhaust Primary Exhaust PM2.5 - Total
Start Exhaust Primary Exhaust PM2.5 - Total
Crankcase Running Exhaust Primary Exhaust PM2.5 - Total
Crankcase Start Exhaust Primary Exhaust PM2.5 - Total
Crankcase Extended Idle Exhaust Primary Exhaust PM2.5 - Total
Extended Idle Exhaust Primary Exhaust PM2.5 - Total
Brakewear Primary PM10 - Brakewear Particulate
Running Exhaust Primary PM10 - Elemental Carbon
Start Exhaust Primary PM10 - Elemental Carbon
Crankcase Running Exhaust Primary PM10 - Elemental Carbon
Crankcase Start Exhaust Primary PM10 - Elemental Carbon
Crankcase Extended Idle Exhaust Primary PM10 - Elemental
Carbon
Extended Idle Exhaust Primary PM10 - Elemental Carbon
Running Exhaust Primary PM10 - Organic Carbon
Start Exhaust Primary PM10 - Organic Carbon
Crankcase Running Exhaust Primary PM10 - Organic Carbon
Crankcase Start Exhaust Primary PM10 - Organic Carbon
Crankcase Extended Idle Exhaust Primary PM10 - Organic Carbon
Extended Idle Exhaust Primary PM10 - Organic Carbon
Running Exhaust Primary PM10 - Sulfate Particulate
Start Exhaust Primary PM10 - Sulfate Particulate
Crankcase Running Exhaust Primary PM10 - Sulfate Particulate
Crankcase Start Exhaust Primary PM10 - Sulfate Particulate
Crankcase Extended Idle Exhaust Primary PM10 - Sulfate
Particulate
Extended Idle Exhaust Primary PM10 - Sulfate Particulate
Tirewear Primary PM10 - Tirewear Particulate
Brakewear Primary PM2.5 - Brakewear Particulate
Running Exhaust Primary PM2.5 - Elemental Carbon
Start Exhaust Primary PM2.5 - Elemental Carbon
Crankcase Running Exhaust Primary PM2.5 - Elemental Carbon
Crankcase Start Exhaust Primary PM2.5 - Elemental Carbon
Crankcase Extended Idle Exhaust Primary PM2.5 - Elemental
Carbon
Extended Idle Exhaust Primary PM2.5 - Elemental Carbon
Running Exhaust Primary PM2.5 - Organic Carbon
Start Exhaust Primary PM2.5 - Organic Carbon

Crankcase Running Exhaust Primary PM2.5 - Organic Carbon
Crankcase Start Exhaust Primary PM2.5 - Organic Carbon
Crankcase Extended Idle Exhaust Primary PM2.5 - Organic
Carbon
Extended Idle Exhaust Primary PM2.5 - Organic Carbon
Running Exhaust Primary PM2.5 - Sulfate Particulate
Start Exhaust Primary PM2.5 - Sulfate Particulate
Crankcase Running Exhaust Primary PM2.5 - Sulfate Particulate
Crankcase Start Exhaust Primary PM2.5 - Sulfate Particulate
Crankcase Extended Idle Exhaust Primary PM2.5 - Sulfate
Particulate
Extended Idle Exhaust Primary PM2.5 - Sulfate Particulate
Tirewear Primary PM2.5 - Tirewear Particulate
Running Exhaust Sulfur Dioxide (SO2)
Start Exhaust Sulfur Dioxide (SO2)
Crankcase Running Exhaust Sulfur Dioxide (SO2)
Crankcase Start Exhaust Sulfur Dioxide (SO2)
Crankcase Extended Idle Exhaust Sulfur Dioxide (SO2)
Extended Idle Exhaust Sulfur Dioxide (SO2)
Running Exhaust Total Energy Consumption
Start Exhaust Total Energy Consumption
Extended Idle Exhaust Total Energy Consumption
Running Exhaust Total Gaseous Hydrocarbons
Start Exhaust Total Gaseous Hydrocarbons
Evap Fuel Vapor Venting Total Gaseous Hydrocarbons
Evap Fuel Leaks Total Gaseous Hydrocarbons
Crankcase Extended Idle Exhaust Total Gaseous Hydrocarbons
Refueling Displacement Vapor Loss Total Gaseous Hydrocarbons
Refueling Spillage Loss Total Gaseous Hydrocarbons
Extended Idle Exhaust Total Gaseous Hydrocarbons
Running Exhaust Volatile Organic Compounds
Start Exhaust Volatile Organic Compounds
Evap Fuel Vapor Venting Volatile Organic Compounds
Evap Fuel Leaks Volatile Organic Compounds
Crankcase Running Exhaust Volatile Organic Compounds
Crankcase Start Exhaust Volatile Organic Compounds
Crankcase Extended Idle Exhaust Volatile Organic Compounds
Refueling Displacement Vapor Loss Volatile Organic Compounds

```
Refueling Spillage Loss Volatile Organic Compounds
Extended Idle Exhaust Volatile Organic Compounds


Strategies:


Strategies:


Rate of Progress:
    Rate of Progress calculations are disabled


Manage Input Data Sets:


General Output:
    Output Database Server Name: [using default]
    Output Database Name: StageII_out
    Units:
        Mass Units: Grams
        Energy Units: Million BTU
        Distance Units: Miles
    Activity Outputs:
        Distance Traveled
        Population


Output Emissions Breakdown:
    Emission Process
    On Road/Off Road
    Road Type
    Source Use Type
    Output Time Step
        Hour
    Geographic Output Detail
        COUNTY


Advanced Performance Features:
    Do Not Execute:
    Save Data From:
    Do Not Save Generator Data
    Saved Data Database Server Name: [using default]
```

Saved Data Database Name: [using default]
Custom Default Database Server Name: [using default]
Custom Default Database Name: [using default]
Perform Final Aggregation (if necessary)

EPA MOVES RunSpec File Name:
    D:\Run Specs\CNAA2014_StageII.mrs

Description:
2014 CNAA - Stage II

Domain/Scale: County
Calculation Type: Inventory

Time Spans:
    Aggregate By: Hour
    Years:
        2014

    Months:
        July
    Days:
        Weekdays
    Hours:
        Begin Hour: 00:00 - 00:59
        End Hour: 23:00 - 23:59

Geographic Bounds:
    COUNTY geography
    Selection: ILLINOIS - Cook County

On Road Vehicle Equipment:
    Diesel Fuel - Combination Long-haul Truck
    Diesel Fuel - Combination Short-haul Truck
    Diesel Fuel - Intercity Bus
    Diesel Fuel - Light Commercial Truck
    Diesel Fuel - Motor Home
    Diesel Fuel - Passenger Car
    Diesel Fuel - Passenger Truck
    Diesel Fuel - Refuse Truck
    Diesel Fuel - School Bus
    Diesel Fuel - Single Unit Long-haul Truck
    Diesel Fuel - Single Unit Short-haul Truck

```
    Diesel Fuel - Transit Bus
    Gasoline - Combination Short-haul Truck
    Gasoline - Light Commercial Truck
    Gasoline - Motor Home
    Gasoline - Motorcycle
    Gasoline - Passenger Car
    Gasoline - Passenger Truck
    Gasoline - Refuse Truck
    Gasoline - School Bus
    Gasoline - Single Unit Long-haul Truck
    Gasoline - Single Unit Short-haul Truck
    Gasoline - Transit Bus

Road Types:
    Off-Network
    Rural Restricted Access
    Rural Unrestricted Access
    Urban Restricted Access
    Urban Unrestricted Access

Pollutants And Processes:
    Running Exhaust Ammonia (NH3)
    Start Exhaust Ammonia (NH3)
    Crankcase Running Exhaust Ammonia (NH3)
    Crankcase Start Exhaust Ammonia (NH3)
    Crankcase Extended Idle Exhaust Ammonia (NH3)
    Extended Idle Exhaust Ammonia (NH3)
    Running Exhaust Atmospheric CO2
    Start Exhaust Atmospheric CO2
    Running Exhaust CO2 Equivalent
    Start Exhaust CO2 Equivalent
    Running Exhaust Carbon Monoxide (CO)
    Start Exhaust Carbon Monoxide (CO)
    Crankcase Running Exhaust Carbon Monoxide (CO)
    Crankcase Start Exhaust Carbon Monoxide (CO)
    Crankcase Extended Idle Exhaust Carbon Monoxide (CO)
    Extended Idle Exhaust Carbon Monoxide (CO)
    Running Exhaust Methane (CH4)
```

Start Exhaust Methane (CH4)
Crankcase Running Exhaust Methane (CH4)
Crankcase Start Exhaust Methane (CH4)
Crankcase Extended Idle Exhaust Methane (CH4)
Refueling Displacement Vapor Loss Methane (CH4)
Refueling Spillage Loss Methane (CH4)
Extended Idle Exhaust Methane (CH4)
Running Exhaust Non-Methane Hydrocarbons
Start Exhaust Non-Methane Hydrocarbons
Evap Fuel Vapor Venting Non-Methane Hydrocarbons
Evap Fuel Leaks Non-Methane Hydrocarbons
Crankcase Running Exhaust Non-Methane Hydrocarbons
Crankcase Start Exhaust Non-Methane Hydrocarbons
Crankcase Extended Idle Exhaust Non-Methane Hydrocarbons
Refueling Displacement Vapor Loss Non-Methane Hydrocarbons
Refueling Spillage Loss Non-Methane Hydrocarbons
Extended Idle Exhaust Non-Methane Hydrocarbons
Running Exhaust Oxides of Nitrogen (NOx)
Start Exhaust Oxides of Nitrogen (NOx)
Crankcase Running Exhaust Oxides of Nitrogen (NOx)
Crankcase Start Exhaust Oxides of Nitrogen (NOx)
Crankcase Extended Idle Exhaust Oxides of Nitrogen (NOx)
Extended Idle Exhaust Oxides of Nitrogen (NOx)
Running Exhaust Petroleum Energy Consumption
Start Exhaust Petroleum Energy Consumption
Extended Idle Exhaust Petroleum Energy Consumption
Running Exhaust Primary Exhaust PM2.5 - Total
Start Exhaust Primary Exhaust PM2.5 - Total
Crankcase Running Exhaust Primary Exhaust PM2.5 - Total
Crankcase Start Exhaust Primary Exhaust PM2.5 - Total
Crankcase Extended Idle Exhaust Primary Exhaust PM2.5 - Total
Extended Idle Exhaust Primary Exhaust PM2.5 - Total
Brakewear Primary PM2.5 - Brakewear Particulate
Running Exhaust Primary PM2.5 - Elemental Carbon
Start Exhaust Primary PM2.5 - Elemental Carbon
Crankcase Running Exhaust Primary PM2.5 - Elemental Carbon
Crankcase Start Exhaust Primary PM2.5 - Elemental Carbon
Crankcase Extended Idle Exhaust Primary PM2.5 - Elemental

Carbon
- Extended Idle Exhaust Primary PM2.5 - Elemental Carbon
- Running Exhaust Primary PM2.5 - Organic Carbon
- Start Exhaust Primary PM2.5 - Organic Carbon
- Crankcase Running Exhaust Primary PM2.5 - Organic Carbon
- Crankcase Start Exhaust Primary PM2.5 - Organic Carbon
- Crankcase Extended Idle Exhaust Primary PM2.5 - Organic

Carbon
- Extended Idle Exhaust Primary PM2.5 - Organic Carbon
- Running Exhaust Primary PM2.5 - Sulfate Particulate
- Start Exhaust Primary PM2.5 - Sulfate Particulate
- Crankcase Running Exhaust Primary PM2.5 - Sulfate Particulate
- Crankcase Start Exhaust Primary PM2.5 - Sulfate Particulate
- Crankcase Extended Idle Exhaust Primary PM2.5 - Sulfate

Particulate
- Extended Idle Exhaust Primary PM2.5 - Sulfate Particulate
- Tirewear Primary PM2.5 - Tirewear Particulate
- Running Exhaust Sulfur Dioxide (SO2)
- Start Exhaust Sulfur Dioxide (SO2)
- Crankcase Running Exhaust Sulfur Dioxide (SO2)
- Crankcase Start Exhaust Sulfur Dioxide (SO2)
- Crankcase Extended Idle Exhaust Sulfur Dioxide (SO2)
- Extended Idle Exhaust Sulfur Dioxide (SO2)
- Running Exhaust Total Energy Consumption
- Start Exhaust Total Energy Consumption
- Extended Idle Exhaust Total Energy Consumption
- Running Exhaust Total Gaseous Hydrocarbons
- Start Exhaust Total Gaseous Hydrocarbons
- Evap Fuel Vapor Venting Total Gaseous Hydrocarbons
- Evap Fuel Leaks Total Gaseous Hydrocarbons
- Crankcase Extended Idle Exhaust Total Gaseous Hydrocarbons
- Refueling Displacement Vapor Loss Total Gaseous Hydrocarbons
- Refueling Spillage Loss Total Gaseous Hydrocarbons
- Extended Idle Exhaust Total Gaseous Hydrocarbons
- Running Exhaust Volatile Organic Compounds
- Start Exhaust Volatile Organic Compounds
- Evap Fuel Vapor Venting Volatile Organic Compounds
- Evap Fuel Leaks Volatile Organic Compounds

```
        Crankcase Running Exhaust Volatile Organic Compounds
        Crankcase Start Exhaust Volatile Organic Compounds
        Crankcase Extended Idle Exhaust Volatile Organic Compounds
        Refueling Displacement Vapor Loss Volatile Organic Compounds
        Refueling Spillage Loss Volatile Organic Compounds
        Extended Idle Exhaust Volatile Organic Compounds


Strategies:


Strategies:


Rate of Progress:
    Rate of Progress calculations are disabled


Manage Input Data Sets:


General Output:
    Output Database Server Name: [using default]
    Output Database Name: StageII_out
    Units:
        Mass Units: Grams
        Energy Units: Million BTU
        Distance Units: Miles
    Activity Outputs:
        Distance Traveled
        Population


Output Emissions Breakdown:
    Emission Process
    On Road/Off Road
    Road Type
    Source Use Type
    Output Time Step
        Hour
    Geographic Output Detail
        COUNTY


Advanced Performance Features:
```

Do Not Execute:
Save Data From:
Do Not Save Generator Data
Saved Data Database Server Name: [using default]
Saved Data Database Name: [using default]
Custom Default Database Server Name: [using default]
Custom Default Database Name: [using default]
Perform Final Aggregation (if necessary)

```
EPA MOVES RunSpec File Name:
    D:\Run Specs\CNAA2020_StageII.mrs

Description:
2020 CNAA - Stage II

Domain/Scale: County
Calculation Type: Inventory

Time Spans:
    Aggregate By: Hour
    Years:
        2020

    Months:
        July
    Days:
        Weekdays
    Hours:
        Begin Hour: 00:00 - 00:59
        End Hour: 23:00 - 23:59

Geographic Bounds:
    COUNTY geography
    Selection: ILLINOIS - Cook County

On Road Vehicle Equipment:
    Diesel Fuel - Combination Long-haul Truck
    Diesel Fuel - Combination Short-haul Truck
    Diesel Fuel - Intercity Bus
    Diesel Fuel - Light Commercial Truck
    Diesel Fuel - Motor Home
    Diesel Fuel - Passenger Car
    Diesel Fuel - Passenger Truck
    Diesel Fuel - Refuse Truck
    Diesel Fuel - School Bus
    Diesel Fuel - Single Unit Long-haul Truck
    Diesel Fuel - Single Unit Short-haul Truck
```

Diesel Fuel - Transit Bus
Gasoline - Combination Short-haul Truck
Gasoline - Light Commercial Truck
Gasoline - Motor Home
Gasoline - Motorcycle
Gasoline - Passenger Car
Gasoline - Passenger Truck
Gasoline - Refuse Truck
Gasoline - School Bus
Gasoline - Single Unit Long-haul Truck
Gasoline - Single Unit Short-haul Truck
Gasoline - Transit Bus

Road Types:
Off-Network
Rural Restricted Access
Rural Unrestricted Access
Urban Restricted Access
Urban Unrestricted Access

Pollutants And Processes:
Running Exhaust Ammonia (NH3)
Start Exhaust Ammonia (NH3)
Crankcase Running Exhaust Ammonia (NH3)
Crankcase Start Exhaust Ammonia (NH3)
Crankcase Extended Idle Exhaust Ammonia (NH3)
Extended Idle Exhaust Ammonia (NH3)
Running Exhaust Atmospheric CO2
Start Exhaust Atmospheric CO2
Running Exhaust CO2 Equivalent
Start Exhaust CO2 Equivalent
Running Exhaust Carbon Monoxide (CO)
Start Exhaust Carbon Monoxide (CO)
Crankcase Running Exhaust Carbon Monoxide (CO)
Crankcase Start Exhaust Carbon Monoxide (CO)
Crankcase Extended Idle Exhaust Carbon Monoxide (CO)
Extended Idle Exhaust Carbon Monoxide (CO)
Running Exhaust Methane (CH4)

Start Exhaust Methane (CH4)
Crankcase Running Exhaust Methane (CH4)
Crankcase Start Exhaust Methane (CH4)
Crankcase Extended Idle Exhaust Methane (CH4)
Refueling Displacement Vapor Loss Methane (CH4)
Refueling Spillage Loss Methane (CH4)
Extended Idle Exhaust Methane (CH4)
Running Exhaust Non-Methane Hydrocarbons
Start Exhaust Non-Methane Hydrocarbons
Evap Fuel Vapor Venting Non-Methane Hydrocarbons
Evap Fuel Leaks Non-Methane Hydrocarbons
Crankcase Running Exhaust Non-Methane Hydrocarbons
Crankcase Start Exhaust Non-Methane Hydrocarbons
Crankcase Extended Idle Exhaust Non-Methane Hydrocarbons
Refueling Displacement Vapor Loss Non-Methane Hydrocarbons
Refueling Spillage Loss Non-Methane Hydrocarbons
Extended Idle Exhaust Non-Methane Hydrocarbons
Running Exhaust Oxides of Nitrogen (NOx)
Start Exhaust Oxides of Nitrogen (NOx)
Crankcase Running Exhaust Oxides of Nitrogen (NOx)
Crankcase Start Exhaust Oxides of Nitrogen (NOx)
Crankcase Extended Idle Exhaust Oxides of Nitrogen (NOx)
Extended Idle Exhaust Oxides of Nitrogen (NOx)
Running Exhaust Petroleum Energy Consumption
Start Exhaust Petroleum Energy Consumption
Extended Idle Exhaust Petroleum Energy Consumption
Running Exhaust Primary Exhaust PM2.5 - Total
Start Exhaust Primary Exhaust PM2.5 - Total
Crankcase Running Exhaust Primary Exhaust PM2.5 - Total
Crankcase Start Exhaust Primary Exhaust PM2.5 - Total
Crankcase Extended Idle Exhaust Primary Exhaust PM2.5 - Total
Extended Idle Exhaust Primary Exhaust PM2.5 - Total
Brakewear Primary PM2.5 - Brakewear Particulate
Running Exhaust Primary PM2.5 - Elemental Carbon
Start Exhaust Primary PM2.5 - Elemental Carbon
Crankcase Running Exhaust Primary PM2.5 - Elemental Carbon
Crankcase Start Exhaust Primary PM2.5 - Elemental Carbon
Crankcase Extended Idle Exhaust Primary PM2.5 - Elemental

Carbon

    Extended Idle Exhaust Primary PM2.5 - Elemental Carbon
    Running Exhaust Primary PM2.5 - Organic Carbon
    Start Exhaust Primary PM2.5 - Organic Carbon
    Crankcase Running Exhaust Primary PM2.5 - Organic Carbon
    Crankcase Start Exhaust Primary PM2.5 - Organic Carbon
    Crankcase Extended Idle Exhaust Primary PM2.5 - Organic

Carbon

    Extended Idle Exhaust Primary PM2.5 - Organic Carbon
    Running Exhaust Primary PM2.5 - Sulfate Particulate
    Start Exhaust Primary PM2.5 - Sulfate Particulate
    Crankcase Running Exhaust Primary PM2.5 - Sulfate Particulate
    Crankcase Start Exhaust Primary PM2.5 - Sulfate Particulate
    Crankcase Extended Idle Exhaust Primary PM2.5 - Sulfate

Particulate

    Extended Idle Exhaust Primary PM2.5 - Sulfate Particulate
    Tirewear Primary PM2.5 - Tirewear Particulate
    Running Exhaust Sulfur Dioxide (SO2)
    Start Exhaust Sulfur Dioxide (SO2)
    Crankcase Running Exhaust Sulfur Dioxide (SO2)
    Crankcase Start Exhaust Sulfur Dioxide (SO2)
    Crankcase Extended Idle Exhaust Sulfur Dioxide (SO2)
    Extended Idle Exhaust Sulfur Dioxide (SO2)
    Running Exhaust Total Energy Consumption
    Start Exhaust Total Energy Consumption
    Extended Idle Exhaust Total Energy Consumption
    Running Exhaust Total Gaseous Hydrocarbons
    Start Exhaust Total Gaseous Hydrocarbons
    Evap Fuel Vapor Venting Total Gaseous Hydrocarbons
    Evap Fuel Leaks Total Gaseous Hydrocarbons
    Crankcase Extended Idle Exhaust Total Gaseous Hydrocarbons
    Refueling Displacement Vapor Loss Total Gaseous Hydrocarbons
    Refueling Spillage Loss Total Gaseous Hydrocarbons
    Extended Idle Exhaust Total Gaseous Hydrocarbons
    Running Exhaust Volatile Organic Compounds
    Start Exhaust Volatile Organic Compounds
    Evap Fuel Vapor Venting Volatile Organic Compounds
    Evap Fuel Leaks Volatile Organic Compounds

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    Crankcase Running Exhaust Volatile Organic Compounds
    Crankcase Start Exhaust Volatile Organic Compounds
    Crankcase Extended Idle Exhaust Volatile Organic Compounds
    Refueling Displacement Vapor Loss Volatile Organic Compounds
    Refueling Spillage Loss Volatile Organic Compounds
    Extended Idle Exhaust Volatile Organic Compounds


Strategies:


Strategies:


Rate of Progress:
    Rate of Progress calculations are disabled


Manage Input Data Sets:


General Output:
    Output Database Server Name: [using default]
    Output Database Name: StageII_out
    Units:
        Mass Units: Grams
        Energy Units: Million BTU
        Distance Units: Miles
    Activity Outputs:
        Distance Traveled
        Population


Output Emissions Breakdown:
    Emission Process
    On Road/Off Road
    Road Type
    Source Use Type
    Output Time Step
        Hour
    Geographic Output Detail
        COUNTY


Advanced Performance Features:
```

Do Not Execute:
Save Data From:
Do Not Save Generator Data
Saved Data Database Server Name: [using default]
Saved Data Database Name: [using default]
Custom Default Database Server Name: [using default]
Custom Default Database Name: [using default]
Perform Final Aggregation (if necessary)