

AIR TOXICS UPDATES

(PLUS SOME OTHER FUN STUFF!)

Melissa Ellis
NDEQ Air Toxics Coordinator
Environmental Updates– March 22, 2012



OVERVIEW

- Boilers
- Engines
- Chemical Manufacturing
- Upcoming Important Dates
- Resources & Tools



BOILER & INCINERATOR RULES

○ NESHAPs

- Subpart JJJJJJ (6J) – Area Sources – Boilers
- Subpart DDDDD (5D) – Major Sources – Boilers & Process Heaters
- Subpart UUUUU (5U) – Power Plants

○ NSPS

- Subparts D, Da, Db, Dc – Boilers & Power Plants
- Subparts CCCC & DDDD – Commercial & Industrial Incinerators - CISWI

AREA SOURCE BOILERS – NESHAP 6J

- Final Rule 3/21/11
 - Reconsideration - still effective
- Area source of HAP - Oil, biomass, & coal
 - Natural gas exempt, backup oil during curtailment
- < 10 MMBTU/hr
 - Biennial tune-up
- ≥ 10 MMBTU/hr
 - Existing
 - All = energy assessment
 - Coal = emission limits
 - Oil & biomass = tune-up

AREA SOURCE BOILERS – NESHAP 6J

- ≥ 10 MMBTU/hr
 - New
 - Coal = Hg, CO, & PM emission limits
 - Oil & biomass
 - PM emission limits
 - Biennial tune-up
- Emission Limits
 - Initial testing
 - Testing every three years
 - Fuel analyses
 - Monitoring



AREA SOURCE BOILERS – NESHAP 6J

- Reconsideration proposal 12/23/11
 - Temporary not subject
 - Tune-ups – extra year to comply for existing, none for new
 - Tune-ups every 5 years
 - Seasonal boilers
 - Oil-fired ≤ 5 MMBTU/hr
 - Increased mercury and CO limits for coal-fired
 - Definitions & clarifications

AREA SOURCE BOILERS – NESHAP 6J

- **No Action Assurance letter 3/13/12**
 - 3/21/12 - tune-up – will not enforce
- Final in April?
- More information:
www.deq.state.ne.us/AirToxic.nsf/pages/JJJJJ

MAJOR SOURCE BOILERS/PROCESS HEATERS – NESHAP 5D & CISWI

- Final Rule 9/13/04
- Vacatur 6/19/07
 - Included portion of CISWI rule
 - Burning solid waste or fuel?
- Proposal 6/4/10
 - Non-hazardous solid waste definition to waste rules
- Final 3/21/11
 - Reconsideration
- Stay of Effectiveness 5/16/11

MAJOR SOURCE BOILERS/PROCESS HEATERS – NESHAP 5D & CISWI

- 3/21/11 Rule – Major source of HAP

- <10 MMBtu/hr
 - Biennial tune-up
 - Existing sources – energy assessment

- ≥ 10 MMBtu/hr
 - Solid fuel, Gas 2, & oil = emission limits
 - Gas 1 = annual tune-up
 - Existing sources – energy assessment
 - Limited use = Biennial tune-up

MAJOR SOURCE BOILERS/PROCESS HEATERS – NESHAP 5D & CISWI

- Proposal (NESHAP 5D) 12/23/11
 - **Major changes**
 - Subcategories
 - Emission Limits
 - Monitoring
 - Definitions etc.
- Vacatur of the stay 1/9/12
 - **3/21/11 rule in effect**
- No action assurance letter 2/7/12
 - **No notifications due**

MAJOR SOURCE BOILERS/PROCESS HEATERS – NESHAP 5D & CISWI

- Final in April?
- More information:
www.deq.state.ne.us/AirToxic.nsf/pages/DDDDD



POWER PLANTS – NESHAP 5U & NSPS D, Da, (Db, & Dc)

- “Listed” Source Category 12/2000
- Proposal Clean Air Mercury Rule (CAMR)
1/30/04
 - Two options – NESHAP or Cap & Trade/NSPS
- CAMR Final 3/15/05
 - Cap & Trade/NSPS
 - Reversed 12/2000 decision
- CAMR Vacatur 2/8/08
 - Courts required NESHAP final by 11/16/11

POWER PLANTS – NESHAP 5U & NSPS D, Da, (Db, & Dc)

- Final 2/16/12 (proposed 3/16/11)
 - Effective 4/16/12
 - 25 MWe, Oil- & Coal-fired
- NESHAP emission limits
 - Metal HAPs (PM)
 - Organic HAPs (HCl or SO₂)
 - Mercury
- NSPS changes
 - Emission limits for sources after 5/3/11
 - No_x, SO₂, & PM
 - Monitoring, testing, & other changes

POWER PLANTS – NESHAP 5U & NSPS D, Da, (Db, & Dc)

- 8/14/12 NESHAP Initial Notifications due
- 4/16/15 NESHAP Compliance date
- More information:
www.deq.state.ne.us/AirToxic.nsf/pages/UUUUU
www.deq.state.ne.us/NSPS.nsf/pages/Da

ENGINES - NESHAP SUBPART ZZZZ

- 4 significant rule actions

- Original: June 15, 2004 (effective 8/16/04)
- Revision: January 18, 2008 (effective 3/18/08)
- Revision: March 3, 2010 (effective 5/3/10)
- Revision: August 20, 2010 (effective 10/19/10)

Engine Type & Applicable Rules	Major source	Area source
Existing and > 500hp	Yes ¹ Compression Ignition ⁴	Compression Ignition ³
Existing and ≤ 500 hp	Compression Ignition Spark Ignition	Spark Ignition ³
New/reconstructed and > 500hp	Yes ¹	Yes ^{2,3}
New/reconstructed and ≤ 500 hp	Yes ²	

ENGINES - NESHAP SUBPART ZZZZ

- Stationary
 - NEW interpretation
 - On skids or trailer, separate from emission unit = nonroad engine
 - Not subject to NESHAP
 - See me for more info!!
- Area & major sources of HAP
- Most sources affected by 2010 rules

SUBPART ZZZZ – WORK PRACTICE

Existing, Area

- Emergency & Black Start CI & SI
- Non-emergency
 - CI \leq 300 HP
 - SI Landfill/digester
 - SI 2SLB
 - SI 4SLB & 4SRB \leq 500 HP
 - SI 4SLB & 4SRB $>$ 500 HP \leq 24 hrs/yr

Existing Major

- Emergency & Black Start
 - CI
 - SI \leq 500 HP
- Non-emergency CI & SI $<$ 100 HP

SUBPART ZZZZ – NUMERICAL STANDARDS

Existing, Area

- Non-emergency
CI > 300 HP
- Non-emergency
SI > 500 HP > 24
hrs/yr

Existing, Major

- Non-emergency
 - CI > 100 HP
 - SI > 100 HP ≤
500 HP
 - SI 4SRB > 500
HP

SUBPART ZZZZ – EMERGENCY ENGINES

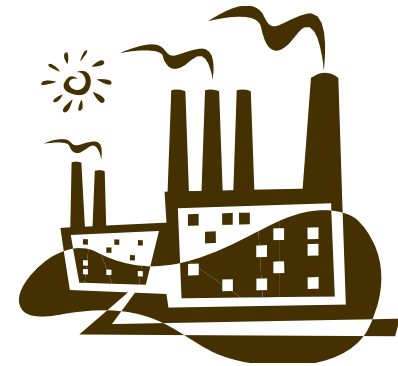
- Emergency & required testing & maintenance (100 hours/yr)
- NO peak shaving for your facility or the grid
- NO interruptible service contract with utility
- 15 hr/yr for demand response
- Emergency power as part of financial agreement

ENGINES - NESHAP SUBPART ZZZZ

- Reconsideration letter 10/18/11
 - Peak shaving for small engines
- Proposed Settlement 1/4/12
 - Demand response increased to 60 hours (15)
 - Required to propose changes by 4/20/12
 - Will also include peak shaving
- **5/3/13 Compliance date**
- More information:
www.deq.state.ne.us/AirToxic.nsf/pages/ZZZZ

CHEMICAL MFG. AREA SOURCES – NESHAP SUBPART VVVVVV (6V)

- Final 10/29/09
- Proposal 1/30/12
 - Comments due 3/30/12
 - Clarifies applicability questions
 - Gas streams vs. liquid process streams
- 10/29/12 Compliance Date
- More information:
www.deq.state.ne.us/AirToxic.nsf/pages/VVVVVV



AIR TOXICS & NSPS NOTEBOOKS

- Specific information for each NESHAP (Part 63) & NSPS (Part 60) rule
 - Rules, court decisions, guidance, training, etc.
- www.deq.state.ne.us
 - Focus on Air

▼ Air Planning and Development Program

▼ Air Planning and Development Program

[Air Planning and Development Program](#)

[Title 129 - Nebraska Air Quality Regulations](#)

▼ Air Toxics Program

[Air Toxics Program](#)

[Air Toxics Notebook - Guide to NESHAPs](#)

[Air Toxics Publications & Forms](#)

▼ Ground-Level Ozone

[Ground-Level Ozone](#)

▼ New Source Performance Standards (NSPS) Program

[New Source Performance Standards \(NSPS\) Program](#)


[NSPS Notebook](#)

AIRNEWS LISTSERV

- Post updates every two weeks
- Creating AirNews webpage with important dates and listserv archives
- Subscribe: send email to
 - listserv@listserv.nebraska.gov
 - SUBSCRIBE DEQ-AirNews your name - in body of message, not subject
 - Nothing else in body, not even signature block
 - Email confirmation returned



EXAMPLE

 Send	To...	<u>listserv@listserv.nebraska.gov;</u>
	Cc...	
	Bcc...	
	Subject:	

SUBSCRIBE DEQ-AirNews Melissa Ellis



CONTACT

- Melissa Ellis
 - Air Toxics Coordinator
 - melissa.ellis@nebraska.gov
 - 402-471-6624
- Stephenie Moyer
 - NSPS Coordinator
 - stephenie.moyer@nebraska.gov
 - 402-471-0019

