Illinois Environmental Protection Agency
Bureau of Air
Permit Section

Responsiveness Summary for the Revised Clean Air Act Permit Program (CAAPP) Permit Issued to:

City of Springfield for the City Water Light and Power Dallman Station Springfield, Illinois September 11, 2017

Source I.D. No.: 167120AAO
Permit No.: 95090091

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Attachment 1: Changes between the Draft Permit and the Issued Permit
A. DECISION

On September 11, 2017, the Illinois EPA issued a revised Clean Air Act Permit Program (CAAPP) permit to the City of Springfield for the City Water Light & Power (CWLP) – Dallman Station (Dallman).

B. BACKGROUND

The CWLP Dallman Station is a coal-fired electric power plant owned and operated by the City of Springfield. The plant has four coal-fired boilers that produce steam that is then used to generate electricity. The Dallman Station qualifies as a major source of emissions under Illinois’ Clean Air Act Permit Program (CAAPP).

The CAAPP is Illinois’ operating permit program for sources of emissions pursuant to Title V of the federal Clean Air Act. The CAAPP is administered by the Illinois EPA. The CAAPP generally requires that major stationary sources of emissions in Illinois apply for and obtain CAAPP permits. CAAPP permits contain conditions identifying applicable air pollution control requirements under the federal Clean Air Act (CAA) and Illinois’ Environmental Protection Act (Act). Compliance procedures, including testing, monitoring, recordkeeping and reporting requirements, are also established as required or necessary to assure compliance and accomplish the purposes of the CAAPP. The conditions of a CAAPP permit are enforceable by the Illinois EPA, USEPA and the public.

The Illinois EPA issued the initial CAAPP permit for the Dallman Station on September 29, 2005. CWLP appealed this permit to the Illinois Pollution Control Board (Board), challenging a number of conditions in the permit. On November 17, 2005 the Board accepted the appeal and on February 16, 2006 the Board confirmed that this permit was stayed in its entirety by operation of law. 1 On May 16, 2013 the source and the Illinois EPA, with the assistance of the Office of the Illinois Attorney General, settled this appeal. 2 A revised CAAPP permit was subsequently issued for the Dallman Station on October 18, 2013 following a public comment period on a draft of the revised permit.

The Illinois EPA then initiated a reopening proceeding under the CAAPP to bring this CAAPP permit up-to-date. The revised CAAPP permit that has been now been issued for Dallman is the result of this reopening proceeding and is the final step in getting an up-to-date CAAPP permit in place for this source. Provisions have now been added in this permit to address emission control requirements that have been adopted by the USEPA and Illinois since the initial CAAPP permit was issued. 3 While Dallman has been required to comply with these requirements as they took effect, the CAAPP permit has now been revised to include provisions addressing these requirements.

1 The Dallman Station is one of many coal-fired power plants in Illinois whose initial CAAPP permits were subsequently appealed to the Board and stayed in their entirety.
2 This settlement occurred in conjunction with the simultaneous release by the Illinois EPA of a draft of planned revisions to the CAAPP permit for the Dallman Station. Following completion of the public comment period on the draft of a revised permit, a revised CAAPP permit was subsequently issued on October 18, 2013.
3 The principal “new” requirements that were added into the CAAPP permit for the Dallman Station are applicable requirements of recently adopted USEPA rules, such as the Cross State Air Pollution Rule (CSAPR) and the Mercury and Air Toxics Standards (MATS).
The revised permit that has now been issued also includes a number of other changes to bring the CAAPP permit for the Dallman Station up to date. It restates the limits set by construction permits issued for projects at Dallman since the initial CAAPP permit was issued. This revised permit also provides final approval of the Compliance Assurance Monitoring (CAM) Plan for the particulate matter (PM) emissions of Boiler 4 at the plant.

C. OPPORTUNITY FOR PUBLIC COMMENTS

The issuance of this revised permit was preceded by a public comment period in accordance with Section 39.5(8) of the Act and 35 IAC Part 252. A draft of the revised permit and the accompanying Statement of Basis prepared by the Illinois EPA were made available for review by the public at the Illinois EPA Headquarters in Springfield. The comment period began on June 8, 2016. A public hearing was held on August 30, 2016 and the comment period ended on September 29, 2016.

The planned issuance of a revised CAAPP permit for the Dallman Station generated a number of comments from one member of the general public, a group of environmental advocacy organizations and USEPA. The comments were helpful to the Illinois EPA in the decision-making process and these comments were fully considered by the Illinois EPA prior to issuing the revised permit.

In this Responsiveness Summary, general comments about this planned permit action that are not related to specific conditions of the permit are addressed first in Section E of this document. The comments concerning specific conditions of the permit are then discussed in Section F. For simplicity and clarity, those comments are arranged in the order of the conditions in the CAAPP permit.

D. AVAILABILITY OF DOCUMENTS

Copies of this Responsiveness Summary and the revised CAAPP permit that has been issued are being made available for viewing by the public at the Illinois EPA’s Headquarters at 1021 North Grand Avenue East in Springfield.

Copies are also available electronically at www.epa.illinois.gov/public-notices and www.epa.gov/region5/air/permits/ilonline.html.

Printed copies of these documents are also available free of charge by calling the Illinois EPA’s Toll Free Environmental Helpline, 888/372-1996, or by contacting Rachel Stewart in the Office of Community Relations.

217-782-2224 Desk line
217-782-9143 TDD
rachel.stewart@illinois.gov

Questions about this permit proceeding should also be directed to Ms. Stewart.

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4 Illinois EPA, Statement of Basis for the Planned Issuance of a Revised CAAPP Permit Through Reopening and Significant Modification And a Revised Acid Rain Program Permit For: City of Springfield, CWLP Dallman Station, June 8, 2016 (Statement of Basis).

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E. GENERAL COMMENTS WITH RESPONSES BY THE ILLINOIS EPA

1. Comment Regarding the Current Compliance Status of the Dallman Station:

CAAPP permits are to address the compliance status of sources. Is the Dallman Station in compliance?

Response:

CWLP currently appears to fully comply with applicable emission standards. However, concern exists about consistent compliance with the state standard for mercury, 35 IAC Part 225 Subpart B. Under these rules, the coal boilers at the Dallman Station, in aggregate, are subject to an emission limit for mercury of 0.0080 pounds per GW-hour gross electrical output, on an annual average rolled monthly. Among other things, these rules require subject sources to submit compliance reports to the Illinois EPA on a quarterly basis. In the four years since issuance of the CAAPP Permit, many of the compliance reports that CWLP submitted showed that mercury emissions, on a 12-month rolling average, exceeded the applicable limit.

The legal framework of the permit renewal process, which differs in terms of standards for issuance and scope of review, is more suitable to evaluate any on-going compliance issue. Unlike a permit modification or renewal proceeding, the current permit reopening is a unilateral action by a permit authority that is meant to promptly address a deficiency in the permit that might not otherwise be addressed through the more conventional application process for modifications or permit renewal. Such a proceeding does not generally contemplate a compliance assessment by a permit authority, or the submission of a compliance plans or schedules, that a permit modification or renewal proceeding would entail. An application for renewal of the CAAPP permit is anticipated from CWLP in August 2017. The Illinois EPA’s preparation of a draft permit, including any determination as to whether CWLP’s CAAPP permit must contain a compliance schedule due to an inability to meet any

5 In Annual Compliance Certifications required under the previous CAAPP permit, CWLP has certified compliance with the requirements addressed by that permit.

For new Dallman Unit 4, in its application for a Significant Modification to the CAAPP permit to address this project, submitted in March 2010, CWLP also indicated that Boiler 4 and other emission units that are part of that project comply with applicable emission standards. (The revised CAAPP permit that has been issued now addresses the Dallman 4 project.)

In its submittal to support this reopening proceeding, dated August 16, 2013, CWLP also indicated that it complied with all applicable federal requirements.

6 As related to emissions of mercury, 35 IAC Part 225 is not part of Illinois’ SIP. As such, it is designated a “state-only requirement” in the revised CAAPP permit.

7 To the extent an evaluation of compliance could become a central issue in a reopening proceeding, it might only arise whenever a permit authority reopens the permit to assure compliance with applicable requirements. See, 415 ILCS 5/39.5(15)(a)(iv). The current proceeding invoked a different basis for permit reopening so that the permit could be brought up-to-date with new applicable requirements. 415 ILCS 5/39.5(15)(a)(i).
applicable requirements of the permit, is generally governed by the procedures set forth at 415 ILCS 5/39.5(5)(m) of the Act. These procedures include public notice and comment of the draft permit and an opportunity for hearing.

2. Comments Regarding Monitoring for Mercury Emissions:

a. Comment:
   In my review of the draft permit, I notice that there are provisions that indicate that the plant does have mercury continuous emissions monitoring systems (CEMS). Does the plant actually have mercury CEMS?

Response:
CWLP currently monitors the emissions of mercury from the coal boilers at the Dallman Station using sorbent trap monitoring systems. The relevant rules provide that sources may monitor emissions of mercury using either sorbent trap systems or continuous emissions monitoring systems. To avoid future confusion as to how CWLP is monitoring mercury emissions, in the issued permit, Condition 6.4.1 no longer discusses the methods that CWLP may use for this monitoring.

b. Comments:
   If the monitoring system for mercury is stated to be continuous but is more of an average over several days, is it possible that mercury limits could be exceeded at some times and lower at other times but the average meets the limits? is this an adequate monitoring system? Can CWLP exceed the levels but the average would still show compliance?

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My understanding is that sorbent traps are an acceptable method of determining compliance with emission standards for mercury. After the sorbent traps are sent off for analysis, can one go back and tell what the mercury emissions were at any given point in time in the past or is the measurement more of an average over that time period?

Response:
The monitoring that is conducted for mercury emissions of the coal boilers is appropriately characterized as “continuous” because all emissions of mercury from the boilers are accounted for and measured. It is fully adequate to identify any violations of the applicable emission standards for mercury. The monitoring does not present concerns for noncompliance with those standards being obscured or not being identified by averaging of data as hypothesized by this comment.

While sorbent trap monitoring provides measurements of mercury emissions from the boilers over periods of several days, the standards for mercury emission from the boilers apply over much longer periods of time.8 Compliance with these standards can be readily determined by

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8 The standards for the mercury emissions of coal utility boilers under the USEPA’s Mercury and Air Toxic Standards (MATS), 40 CFR 63 Subpart UUUU, apply either over 30 operating days or 90 operating days when compliance is determined by monitoring. The standards for mercury emissions under Illinois’ rules, 35 IAC Part 225, apply over a 12-month rolling average. These time periods are reasonable as the objective of both these rules is to require appropriate measures to reduce the amount of mercury that is released into the atmosphere when coal is burned, thereby reducing the amount of mercury that enters the food chain and bioaccumulates as it moves up the food chain.
appropriately combining the measurements made with individual sorbent traps during the period over which compliance with the mercury standards must be determined. The concern expressed by this comment would only be relevant if the applicable standards for mercury emissions applied over periods of time that were shorter that the duration of individual measurements made with sorbent traps, for example, the emission standards applied on a daily basis.  

c. Comment:
I am concerned about emissions because the plant is currently not required to provide 24-hour mercury recordkeeping, so one does not know if emissions are exceeding safe levels. The permit should require 24-hour monitoring of the plant's mercury emissions. As a mother and caregiver, I am concerned about the well-being of my family. Increased exposure to mercury can have deadly consequences, including increased cancer, birth defects, and miscarriages. By employing all safeguards in the permit, the health of families can be guarded. Additionally, any problems can be remedied early on and costly mistakes whose costs would otherwise be passed on to the public can be prevented.

Response:
This comment appears to reflect a fundamental misunderstanding about the nature of the standards that apply to the mercury emissions of the boilers at Dallman. The emission standards were not “back-calculated” from risk analyses that determined the levels of emissions from the boilers at which adverse health impacts might be expected to occur. Rather, the emission standards for mercury that apply to coal utility boilers are intended to require the use of modern control technology to reduce the contribution of coal utility boilers to mercury contamination in the environment, both locally and globally. This means that violation of an emission standard for mercury does not indicate a possible adverse health impacts for the public. Rather, such a violation only reflects a violation of that standard, with emissions having been higher than they should have been.

In this regard, the ambient air is not the route of exposure to mercury that is generally of concern for public health. The pathway that is commonly of concern for human exposure to mercury is consumption of fish containing high levels of mercury. Given this fact, it is important that people be aware of and understand the advisories that

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9 Even if the mercury emission standards were to apply on a daily basis, it would be possible to verify compliance with those standards using sorbent trap monitoring. Monitoring would need to be conducted to provide individual measurements of mercury emissions on a day-by-day basis instead of measurements that can be combined to provide emissions on a 30-day or annual basis.

10 Research indicates mercury contamination in the environment is a global issue. Much of the mercury emissions from power plants in the United States does not deposit within the continental United States. At the same time, much of the mercury deposited in the United States originated elsewhere.

11 The USEPA has not found it appropriate to adopt a National Ambient Air Quality Standard for mercury.

12 Another way that mercury is released into the environment is breakage and disposal of items that contain liquid mercury, such as certain medical thermometers, certain thermostats and certain other devices. These are a concern as breakage or improper disposal of these items may expose the people that are involved to elevated levels of mercury, as well as release mercury into the ambient environment.
are issued by the State of Illinois concerning consumption of fish caught from Illinois waters due to the levels of mercury and other contaminants. In particular, consumption of fish with high mercury levels may pose a health risk, especially for sensitive populations, i.e., children younger than 15 years of age and women who are or may become pregnant, to protect the unborn and nursing infants. Specific advisories are given for particular bodies of water. Further information on the fish advisory for mercury, as well as the advisories for contaminants in fish other than mercury, is available from Department of Public Health:

d. Comments:
I encourage CWLP and the Illinois EPA to explore the possibility of mercury CEMS. My understanding is that this is preferable because it provides real-time information.
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Mercury emissions should be monitored continuously 24 hours a day so one knows what is happening with emissions.
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Mercury CEMS operate 24 hours a day. With CEMS, one would know exactly what the mercury emissions are at any point in time.
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I would like stronger, continuous monitoring.

Response:
As discussed, the concern for emissions of mercury from coal boilers is the long-term, overall release of mercury into the atmosphere and not the short-term, hour-by-hour emissions and the accompanying concentrations of mercury in the ambient air. Sorbent trap monitoring is an effective means of measuring overall emissions of mercury. This is reflected in the applicable rules that address emissions of mercury, which provide that both sorbent trap monitoring and CEMS are acceptable monitoring methods.

3. Comment Concerning Monitoring for Emissions of Other Pollutants
I am a resident of Springfield. I was born and raised here. In 1970, my family moved to Forest Park Hills, the first subdivision across Spaulding Dam just to the east northeast of the power plant. My family lived there until a few years ago. My section of the neighborhood had maybe 50 houses and 200 people living there. In just this little section, there were several people with Parkinson's disease. What is the incidence of neurological impairment in the population as a whole, maybe something like 1 in 300. It could be a total coincidence that several long-term residents developed Parkinson's. I do not know? But my point is that coal ash contains neurotoxins, only one of which is mercury. The fly ash and cinders from the three older boilers are piped with water to disposal ponds. The material from the new boiler is transported in trucks. Dust from these activities blows around. I want continuous monitoring of the heavy metals and other toxins that are coming out of the plant. People everywhere are affected by what is emitted by the plant because the direction of the wind shifts. It is
critically important that there be continuous monitoring for mercury and other heavy metals.

Response:
The boilers at the plant are equipped with continuous emission monitoring systems for the pollutants for which such systems are appropriate and required by applicable rules. The presence of heavy metals in the particulate matter emissions of coal utility boilers is directly addressed by the Mercury and Air Toxin Standards (MATS), 40 CFR 63 Subpart UUUUU. The USEPA has determined that the emissions of metals other than mercury from coal utility boilers are appropriately addressed with emissions standards either for particulate matter or for certain specified metals. In either case, compliance may appropriately be addressed with periodic emissions testing rather than with continuous emissions monitoring. USEPA has also determined that it is appropriate to address emission of mercury, which is emitted primarily as a vapor rather than in the form of particulate matter. USEPA has not identified other toxins that are emitted from coal utility boilers that warrant regulation.

This comment does not show that it is appropriate for continuous emissions monitoring to be conducted for emissions of additional pollutants from the coal boilers at the Dallman Station. Emissions of specific pollutants are regulated based on evidence that those pollutants have adverse impacts that warrant regulation. The anecdotal observation provided in this comment is not a basis to undertake such regulation. Moreover, as the purpose of a CAAPP permit is to compile established requirements in a single permit document, this CAAPP permit would not be the appropriate venue to undertake any such regulation.

4. Comments Concerning Pollution Safeguards under the Clean Air Act:
The revised CAAPP permit should require CWLP to comply with ALL pollution safeguards under the Clean Air Act.

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I am a Girl Scout. I have been learning about climate change and air and water pollution this last year. CWLP’s operating permit needs to be stronger to better protect children with asthma, my friends and me. Please ensure that the permit requires that the Dallman coal plant to comply with all pollution safeguards under the Clean Air Act, including continuous mercury monitoring and limits emission levels during startup, shutdown and malfunction periods.

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The Illinois EPA needs to issue a permit that makes sure CWLP follows all the rules of the Clean Air Act.

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13 Continuous emissions monitoring is conducted on all the boilers for sulfur dioxide and nitrogen oxides. On Boiler 4, continuous monitoring is conducted for particulate matter. The emissions of particulate matter from the three older boilers are addressed indirectly with opacity monitoring systems. As discussed, the emissions of mercury are monitored with sorbent trap systems.

14 The USEPA has also regulated emissions of the acid gases hydrogen chloride and hydrogen fluoride under the MATS rule, establishing emission standards for emissions of hydrogen chloride. However, acid gases are regulated due to their hazardous properties and not due to their toxicity.
I am 11 years old and as a Girl Scout, I make a promise to use resources wisely and to protect the earth. I want to make the world a better place by protecting the air my sister and I breathe. Please require 24-hour monitoring of all the coal boilers at the Dallman plant and strengthen the safety requirements to include all safeguards. Without these safeguards, I fear that the air quality will be harmful for those suffering from asthma and other illnesses.

Response:
The revised CAAPP permit issued for Dallman addresses the regulatory requirements under the Clean Air Act that apply to emission units at the plant. The revised CAAPP permit also includes appropriate requirements for Periodic Monitoring. As such, the revised CAAPP permit includes the “safeguards” required by the Clean Air Act.

In this regard, as a general matter, CAAPP permits are developed to address all applicable requirements under the Clean Air Act that apply to the emissions of the units at a source, including emission standards and other requirement limiting emissions under applicable federal and state regulations and construction permits. CAAPP permits also require sources to carry out Periodic Monitoring (i.e., work practices, testing, emissions and operational monitoring, inspections, recordkeeping and reporting) as appropriate to address compliance with applicable emissions standards and limits and other applicable restrictions related to emissions. The Illinois EPA has carefully considered comments on specific provisions in the CAAPP permit that would be added or revised as part of this reopening proceeding, as discussed in this Responsiveness Summary. As enhancements to those provisions have been justified by comments, changes have been made in the revised permit that has been issued.

5. Comments Regarding Startup, Shutdown and Malfunction:

a. Comment:
The Draft Permit’s reporting and operational requirements during periods of startup, shutdown, and malfunction (“SSM”) of the coal boilers and certain other emission units at the Dallman Station are unlawful, were unlawful when first proposed, and are now actively being replaced across the country. Illinois EPA is apparently relying on SSM provisions in the State Implementation Plan (“SIP”) of the previous national SSM rule. However, SSM exemptions from emission limits as a category run contrary to the Clean Air Act, as determined by recent federal decisions on the topic and as manifested by USEPA’s recent SSM SIP call, because they undermine the protection of the national ambient air quality standards (“NAAQS”) and other fundamental requirements of the Clean Air Act. See USEPA, State Implementation Plans: Response to Petition for Rulemaking; Restatement and Update of EPA’s SSM Policy.

15 To the extent that Monitoring requirements were not established when the emission control requirements were adopted or the existing monitoring requirements are now found to be inadequate, additional Monitoring requirements are set in the CAAPP permit.
Applicable to SIPs; Findings of Substantial Inadequacy; and SIP Calls to Amend Provisions Applying to Excess Emissions During Periods of Startup, Shutdown and Malfunction, (May 25, 2015). The current Illinois SSM SIP has been explicitly invalidated, and the state is obligated to propose a replacement SSM SIP by November of this year.

Accordingly, the current SIP cannot serve as a legitimate basis for Illinois EPA’s terms in this Draft Permit. The Illinois EPA should rescind the explicit allowances for exceedances of emission limits during SSM periods; in the alternative to establish “sunset” provisions in this permit automatically eliminating all SSM permit terms as soon as the SIP provisions upon which they are based are replaced; or at the very least to commit to an immediate and automatic reopener process when the SSM SIP provisions are replaced.

Any exemptions to emission limitations, for whatever reason, are contrary to the Clean Air Act and to USEPA’s longstanding policy that emission limitations must apply and be enforceable at all times. The Clean Air Act specifies that SIPs must include enforceable “emissions limitations,” and further requires that these “emissions limitations” apply on a “continuous” basis. 42 USC 7410(a)(2)(A), (a)(2)(C), 7602(k). Exceptions allowing facilities to emit additional pollutants during SSM events by their operation prevent the “continuous” enforcement of emission limits. Thus, they conflict with the plain language requirement of the Clean Air Act (Sections 110(a)(2)(A) as defined by Section 302(k). Any exemptions also rob USEPA and the public of their enforcement power in violation of the enforcement provisions in Sections 113 and 304 of the Clean Air Act.

Exempting emissions also conflicts with the core purpose of the Clean Air Act. USEPA recognizes its “overarching duty under the [Clean Air Act] to protect public health through effective implementation of the NAAQS.” USEPA Memorandum to Docket EPA-HQ-OAR-2012-0322, at 9. Startup, shutdown and malfunction events result in short-term releases of a large amount of pollution, including releases of sulfur dioxide and nitrogen oxides, as well as other toxic and carcinogenic pollutants, in amounts that are many times above the legal limits. See Environmental Integrity Project, Gaming the System: How Off-the-Books Industrial Upset Emissions Cheat the Public Out of Clean Air, at 5-8 (Aug. 2004). Though there is a paucity of data on excessive emissions events, a 2004 study by the Environmental Integrity Project shows that excess pollution released during SSM events can actually exceed the “normal” annual amount of pollution that facilities report otherwise.

16 Recent court decisions also have emphasized that SIP emission limits must be continuous based on the plain language of the Clean Air Act. USEPA Memorandum to Docket EPA-HQ-OAR-2012-0322, at 4, n. 10 (Feb. 4, 2013) (citing Sierra Club v. Johnson, 551 F.3d 1019 (D.C. Cir. 2008) and U.S. Magnesium, LLC v. EPA, 690 F.3d 1157, 1160 (10th Cir. 2012).


18 A 2012 report from the Louisiana Bucket Brigade concluded that “[o]ver 20% of reports across all refineries contain no information about the accident, what was released, how much, what caused the accident and what will be done to prevent it in the future.” Louisiana Bucket Brigade, Common Ground IV, at 1 (2012).
In short, continuous and enforceable emission limits are the only way to ensure protection of ambient air quality standards. As USEPA noted in its new SSM rule, "SIPs are ambient-based standards and any emissions above the allowable [ambient concentration] may cause or contribute to violations of the national ambient air quality standards." USEPA Memorandum to Docket EPA-HQ-OAR-2012-0322, at 9 (citing 1982 SSM Guidance). Continuous and enforceable limits also ensure that pollution sources continue to have a strong incentive to operate using best practices and to invest in appropriate pollution controls and equipment. 78 FR 12,460 at 12,485.

The D.C. Circuit has held that any affirmative defenses whatsoever against enforcement of emission limitations are inconsistent with the Act. Nat. Res. Def. Council v. E.P.A., 749 F.3d 1055, 1063 (D.C. Cir. 2014). In April of 2014 in Nat. Res. Def. Council, the D.C. Circuit struck down the affirmative defense provisions in regulations allowing cement plants to avoid monetary liability for violations of emission standards during unavoidable malfunctions. Id. at 1064. In so holding, that court noted that the Clean Air Act’s citizen suit and civil penalty provisions, Sections 304 and 113, make the question of what civil penalties, if any, are appropriate in a citizen suit enforcement action a question for district courts to decide, not USEPA. Id. at 1063. The court thus found that USEPA had no authority to create the affirmative defense. Id. at 1064. In response to this ruling, USEPA also has made clear the unlawfulness of allowing unenforced, unrestricted emissions during SSM in its new SSM rule. In that rule, USEPA states that emission limits apply at all times, including SSM, and no affirmative defenses to enforcement may be employed. USEPA, State Implementation Plans: Response to Petition for Rulemaking; Restatement and Update of EPA’s SSM Policy Applicable to SIPs; Findings of Substantial Inadequacy; and SIP Calls to Amend Provisions Applying to Excess Emissions During Periods of Startup, Shutdown and Malfunction (May 25, 2015). \[19\]

Response:
As already discussed, the USEPA’s SIP Call for SSM does not support the changes to the CAAPP permit for Dallman that this comment recommends. Provisions of approved SIPs are not invalidated or directly altered by the SIP call, as claimed by this comment. USEPA clearly recognized this in the preamble to the SIP call stating:

When the USEPA issues a final SIP call to a state, that action alone does not cause any automatic change in the legal status of the existing affected provision(s) in the SIP. During the time that the state takes to develop a SIP revision in response to the SIP call and the time that the EPA takes to evaluate and act upon the resulting SIP submission from the state pursuant to CAA section 110(k), the existing affected SIP provision(s) will remain in place.

80 FR 33840 (June 12, 2015)

The SIP Call requires appropriate rulemaking by affected states and jurisdictions, not source-by-source actions during permitting.\textsuperscript{20} For Illinois, until the Pollution Control Board completes such rulemaking\textsuperscript{21} and this rulemaking is approved by USEPA as revision to Illinois’ SIP, CAAPP permits must implement the provisions of the current SIP.\textsuperscript{22}

It is also not appropriate for this CAAPP permit to include “sunset provisions” or otherwise address the transition between the current SIP and the revised SIP. This is because this transition and other actions that are appropriate in Illinois to respond to the SIP call will necessarily be an aspect of the rulemaking for the required revisions to Illinois SIP.\textsuperscript{23}

\textsuperscript{20} As discussed in this comment, USEPA has reconsidered the provisions that address the potential for “excess emissions” during SSM in the SIPs of a number of states and local jurisdictions, including Illinois’ SIP. USEPA has now found that many of these existing SIP provisions, including the relevant provisions of Illinois rules dealing with startup and malfunction and breakdown events, which USEPA had previously approved, are inconsistent with provisions of the CAA.

Parallel with its SIP Call related to SSM events and its work with affected states and other jurisdictions on revisions to their SIPs, USEPA is also committed to undertaking rulemaking to revise a number of federal emission standards that it adopted. These standards must also be revised so they appropriately address emissions during SSM.

\textsuperscript{21} In Illinois, this rulemaking would involve a proceeding before the Pollution Control Board in which the Illinois EPA, potentially affected sources and interested members of the public could all participate.

\textsuperscript{22} 35 IAC 201.149 prohibits startup (S) of an emission unit or continued operation of an emission unit during malfunction or breakdown (MB) if such operation would cause a violation of an applicable state emission standard absent express permit authorization for such violation. This rule does not address potential violations of SIP limitations during shutdown. Accordingly, changes to Illinois’ SIP related to shutdown are not actually required by the SIP Call, only for startups and “malfunction and breakdown” events, more simply referred to as “malfunctions” by USEPA in the SIP call.

35 IAC 201 Subpart I sets forth a two-step process for addressing compliance with state emission standards during SMB. The first step consists of obtaining authorization by means of a permit application to make a future claim of SMB. The second step involves making a viable claim of SMB. For startup, this consists of showing that all reasonable efforts have been made to minimize emissions from the startup event, to minimize the duration of the event, and to minimize the frequency of such an event. For MB, this consists of showing that continued operation was necessary to prevent injury to persons or severe damage to equipment, or was required to provide essential services. Inherent in this showing is the obligation to show that operation and excess emissions occurred only to the extent necessary.

The City of Springfield sought SMB authorizations for certain units at the Dallman Station. The Illinois EPA reviewed these requests and, as appropriate, granted authorizations in the CAAPP permit for Dallman to make claims of SMB. These authorizations do not equate to an “automatic exemption” from otherwise applicable state standards. These authorizations are fully consistent with long-standing practice in Illinois for permitting and enforcement. In particular, the nature of the coal utility boilers is such that certain excess emissions may occur during SMB that a source cannot reasonably avoid or readily anticipate. However, the source may be held appropriately accountable for excess emissions that should not have occurred regardless of the authorizations in a CAAPP permit related to SMB. In summary, the provisions in the CAAPP permit related to SMB do not translate into any advance determinations related to actual occurrences of excess emissions. Rather, they provide a framework whereby the source is provided with the ability to make a claim of SMB, with any such claim being subject to further review.

\textsuperscript{23} The SIP Call does not simply mandate that current provisions for SSM in the subject SIPs be eliminated and that the current short-term emission standards in SIPs be made
This comment does not identify any deficiencies in the conditions of the permit that deal with SMB as compared to the relevant provisions of Illinois’ current SIP that address SMB. The discussion does not address conditions of the permit that deal with SMB and the provisions for Illinois’ current SIP for SMB.24

In addition, as already explained, the SIP call is not based on a quantitative evaluation by USEPA of the impacts on ambient air quality of extra emissions during SSM events. Rather, the SIP call is based on a reassessment of the language of the CAA by USEPA, as guided by various court decisions related to SSM events. Information has also not been provided to support the claim that the emissions of coal power plants associated with SSM events are significant. The study that has been cited to support this claim, *Gaming the System: How Off-the-Books Industrial Upset Emissions Cheat the Public Out of Clean Air*, does not address coal-fired power plants.25

b. Comment:

I am concerned about startup, shutdown and malfunction and the State Implementation Plan (SIP) gap. By way of background, there are USEPA rules relating to periods of startup, shutdown, and malfunction. Certain Illinois rules provide a defense or an exception for exceedances of state emission standards that occur during startup, shutdown or malfunction. As a result, periods with really high levels applicable at all times. Rather, the SIP Call requires that SIPs be revised so that they appropriately address SSM events. USEPA recognized that a number of different approaches may be possible and appropriate to address various types of emission units and their possible circumstances.

One possible approach recognized by the SIP Call is the adoption of “alternative emission limitations” or emission standards for SSM events. The adoption of such alternative limitations, as contemplated by the SIP Call, would be a task that would also be carried out through rulemaking. Accordingly, while it is correct that certain provisions of Illinois’ SIP dealing with SMB events have now been found by USEPA to be inconsistent with the Clean Air Act, both the revisions to the current provisions and the transition to the new provisions must proceed through the rule of law.

24 It should also be recognized that the challenge of permit conditions made by this comment does not fall within the scope of revisions made in this proceeding to resolve the appeal of the initial CAAPP permit. Effectively, this comment challenges the validity of certain conditions in the initial CAAPP permit that implemented Illinois rules for startups and malfunction/breakdown events. This proceeding is governed by the applicable requirements of Title V and Illinois’ CAAPP program, which act to limit the scope of review to the revisions that would be made to the CAAPP permit.

25 It is also noteworthy that applicable emission standards for boilers commonly address the rate of emissions of a pollutant relative to the heat input to the boiler, the concentration of a pollutant in the exhaust stream of the boiler or the steam or energy output from a boiler. These standards reflect regulatory determinations of emission rates that are achievable by various classes of boilers with appropriate design, operating practices and control devices. These emission standards only indirectly address the mass of emissions going to the atmosphere, in pounds/hour. The actual mass emission rate, in pounds/hour, at any time depends on the load or heat input to the boiler, as well as the relative emission rate, in pounds/mmBtu or ppm, at that time. If the load of a boiler is low during a period of time or an upset, the actual mass emission rate during may be lower than the typical mass emission rate even if the relative emission rate is higher than the typical rate. This also means that violations of emissions standards that are set for boilers based on considerations of emission control technology are not synonymous with elevated concentrations of pollutants in the atmosphere or violations of ambient air quality standards.
of pollution currently get a free pass. Illinois has not yet updated its rules and SIP to be consistent with the new USEPA requirements regarding startup, shutdown and malfunction. I understand that because state rules have not yet been revised, the Illinois EPA is not required to impose these more stringent requirements on startup, shutdown, and malfunction. As a result, CWLP can say that it complies with all the strictest state regulations that apply. But the bottom line is that the plant is not complying with the most stringent requirements for startup, shutdown and malfunction, which are coming at the federal level. CWLP has talked about being environmental and being responsible. I encourage CWLP and the Illinois EPA to explore if there is an opportunity here to comply with more stringent requirements for startup, shutdown and malfunctions so that they are no longer an exception and a free pass for emissions during these periods. People’s lungs do not get a pass during startup, shutdown and malfunction. It is unacceptable that these periods should get a pass because people have to breathe no matter what is going on. The emissions during startup, shutdown and malfunction periods should be limited. The draft permit would authorize such emission exceedance violating the Clean Air Act.

Response:
Contrary to what is stated in this comment, Illinois’ rules do not provide any “exception” from compliance with state emission standards related to shutdown. While it is theoretically possible that there could be an emission unit that would not be able to reasonably comply with applicable emissions standards when during shutdown, this situation is not addressed by Illinois’ rules.

With regard to startup, applicable state rules do not provide sources with a “pass” during startup.26 If an emission unit is not able to comply with a state emission standard during startup, state rules at 35 IAC Part 201 Subpart I provide that alternative requirements may apply during startup of the unit. Most significantly, the source must take measures to minimize emissions from startup of such a unit, including complying with the relevant state emission standards to the extent that it is feasible to do so. If in practice such a source takes actions to appropriately minimize excess emissions from startups, 35 IAC 201.264 provide the source with a prima facie defense in an enforcement action for emissions violations that occur during startup. Accordingly, as the CAAPP permit for Dallman provides for exceedance of certain state emission standards during startup, CWLP must take measures to reduce emissions during startups. For example, startups of the coal boilers must begin using natural gas to bring the boilers and their electrostatic precipitators up to temperature before solid fuel begins to be burned in the boiler.

By way of background, certain types of emission units have emissions profiles during startup for certain pollutants that are different than the profiles during normal operation. At low levels of operation, as are present during startup, certain units cannot be operated to as effectively reduce the generation of emissions of certain pollutants as

26 It is assumed that comments concerning startup of emission units and other comments concerning shutdown and malfunction of units are directed at the role of 35 IAC Part 201 Subpart I, Malfunctions, Breakdowns or Startup, relative to the state emission standards that apply to the Dallman Station.
during normal operation. For safe and stable operation during startup, the operation of these units must be managed in a way that acts to increase the concentration of certain pollutants in their exhaust. The performance of the control devices on certain units may also be affected by temperature so that the devices are not effective until the flue gas has warmed up and the devices reach normal operating temperature. In addition, both emission units and control devices may need to be brought up to the normal operating load and operating temperature gradually to prevent damage from thermal expansion.

At the same time, until recently, state emission standards were developed to reflect emission rates that were achievable during normal operation of emission units and their control equipment. Emission standards were not developed to also address higher rates of emissions that might occur during startup when equipment would not necessarily be able to meet the emission standards that would be set for normal operation. This approach was permissible because, until recently, it was considered appropriate to address emission units that could not or potentially would not comply with established emission standards during startup on a case-by-case basis. Differences in the design and operation of emissions units that would affect their emissions during startup, which could not be readily be addressed during a rulemaking proceeding, could be addressed for individual units in a way that was considered appropriate. Sources that could not guarantee compliance with state emission standards during startup would be required, as provided by 35 IAC 201 Subpart I, to generally explain during permitting how they would appropriately minimize emissions from startup.

It is important to also recognize that many of Illinois’ older emission standards were not adopted to directly address compliance with the National Ambient Air Quality Standards (NAAQS). Rather, these standards were adopted to reflect levels of emissions that would be achievable using appropriate control technology or measures to control emissions. The underlying assumption was that if all sources normally operated to comply with these technology-based standards, the NAAQS would be met. In addition, it was generally considered appropriate that sources should be required to take reasonable measures to reduce their

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27 The USEPA was using a similar approach in its historical rulemaking as the Pollution Control Board. For example, the USEPA’s New Source Performance Standards (NSPS) generally provides that the adopted standards did not apply during startup, shutdown or malfunction. Instead, during such periods, sources were required to use good air pollution control practice to minimize emissions from subject units.

...Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. 40 CFR 60.8(c)

At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. ... 40 CFR 60.11(d)
emissions. It should also be understood that emission standards take a variety of forms. Many emission standards do not limit emissions in pounds per hour but in relative terms. According to the amount of a pollutant emitted during the startup of an emission unit may be lower than during normal operation, the emissions may not comply with the applicable state standard during startup because of the terms in which the standard is expressed. Finally, startup is not a concern for most emission units. For many units, the technology used to control emissions is not affected by startup. For other units, startups occur quickly so startups do not interfere with compliance with emission standards that were developed for normal operation.

For coal-fired utility boilers, Illinois’ current standards for emissions of particulate matter and carbon monoxide and for opacity potentially present issues for compliance during startup. Particulate matter and opacity are affected because the effectiveness of the ESPs is dependent on temperature, being negatively affected by flue gas temperatures that are below the temperature at which the devices are designed to normally operate. Carbon monoxide is affected because the combustion systems must be designed for performance in the normal operating range of the boilers and are not as effective during the low levels of load during startup.

Similarly, applicable state rules do not provide sources a pass during malfunctions or breakdowns. If an emission unit would not reasonably be able to immediately be shutdown upon occurrence of a malfunction of breakdown that results in a violation of a state emission standard, 35 IAC Part 201 Subpart I provide that alternative requirements may apply for such a unit during a malfunction or breakdown event. As with exceedances of standards that occur during startup, the source must take reasonable measures to minimize excess emissions during the event. If in practice such a source takes actions to appropriately minimize excess emissions, 35 IAC 201.264 provides the source with a prima facie defense in an enforcement action for emissions violations that occurred during the event. The additional element in 35 IAC part 201 Subpart I for malfunction and breakdown events is that continued operation of an emission unit, rather than immediate shutdown, must be “…necessary to prevent injury to persons or severe damage to equipment; or … required to provide essential service,” as provided in 35 IAC 201.262.

As a general matter, 35 IAC Part 201 Subpart I recognizes that certain emission units operate in a way or have functions that, as a practical manner, preclude immediate shutdown upon occurrence of a malfunction or breakdown that results in emissions that exceed an applicable state standard. This rule requires that during permitting, sources identify emissions units that have such functions and that could potentially need to continue to operate in the event of a malfunction or breakdown. As part of permitting, such sources must also generally describe the actions that would be taken in the event of malfunctions or breakdowns.

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28 Many of Illinois’ emission standards are “rate based” rules. Emissions of a pollutant from subject units are limited in terms of emission per unit of activity, e.g., pounds of emissions per million Btu heat input or per ton of material processed. Other rules limit the concentration of the pollutant in the exhaust in ppm or grains per standard cubic foot.
35 IAC Part 201 Subpart I also recognizes that if malfunctions and breakdown events do occur, those events need to be able to be addressed by the Illinois EPA on an individual, case-by-case basis. The emission units that are subject to specific state emission standards can differ greatly, considering their size, presence of backup units, past history of operation and other factors. When a malfunction and breakdown occurs, whether the source needed to continue to operate the unit should be open to review. Even if continued operation was generally needed, was the subject unit operated at a level that was consistent with that need? Did the source take appropriate actions to minimize emissions? This rule does not block enforcement if the Illinois EPA determines that operation should not have continued or the actions taken by the source were not sufficient.

Coal-fired utility boilers are clearly a type of emission unit for which continued operation may be needed in the event of a malfunction or breakdown. Providing electricity is an essential service. If possible, an electrical generating unit needs to continue to operate in the event of a malfunction or breakdown until other electrical generating unit can take over so that there is not a disruption in the electrical power supply to the public. The issue that is posed if such an event occurs is whether the source took appropriate actions. The specific state emission standards that are of potential concern for being exceeded during such events are the standards for particulate matter. Fortunately, the ESPs for coal-fired utility boilers are generally robust devices. At Dallman, emission testing shows that the ESPs normally operate with a significant margin of compliance. Unless there were a major malfunction of an ESP, the boiler should be expected to be able to continue to operate in compliance.

c. Comment:
Everything should comply with every requirement of the Clean Air Act with no exceptions.

Response:
The revised CAAPP permit that has been issued for the Dallman Station appropriately requires CWLP to comply with applicable requirements pursuant to the Clean Air Act. As related to startup and malfunction/breakdown events, this is because the revised CAAPP permit continues to implement Illinois rules at 35 IAC Part 201 Subpart I, which are still in place as a matter of state law and as these rules are part of Illinois’ USEPA approved SIP.

6. Comments Concerning Asthma

I am here with a Girl Scout Troop to talk about air pollution. One of my parents has asthma. A set of my grandparents have asthma. I also have a little bit of asthma. I know that coal plants cause smoke and emissions, which are one of the things that can cause asthma attacks. I do not want the smoke from these power plants to make people have a more unhealthy and shorter life.***

I am a Girl Scout, and I am concerned about air quality in Springfield. My sister has asthma.

Response:
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Asthma is a respiratory disease affecting a small but significant percentage of the population. Individuals who have asthma need to be under a doctor’s care. While poor air quality may have a role in triggering asthmatic attacks, it is questionable whether it is the cause of asthma. Poor air quality is also only one of many triggers for asthma and asthma attacks. Poor air quality is likely only a small part of, and, if anything, a complication to an asthma attack that was caused by some other critical trigger such as pollen or dust. To quantitatively link asthma and other respiratory illnesses to poor air quality and then to even go further and link that poor air quality to a specific plant is beyond the requirements of anything that this permit would be allowed to implement or curtail.

7. Comments Concerning Ambient Air Quality

I live pretty close to the power plant. I have a filter mask that I wear from time to time because I have bad allergies, and it gets really bad sometimes. For my grandchildren, along with everybody else’s children and grandchildren, I would like the air to always be of breathable quality.

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I have lived in Springfield since 1973 and am concerned about air quality, specifically the Dallman plant’s impact on air quality. My concern was recently heightened last month when I competed in two local triathlons, one right across from the power plant. Most of the time during these races, I was gasping for every bit of air my lungs could handle. I hoped that the air was clean, but I had my doubts.

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In preparing for this public hearing, I took a close look at the Clean Air Act for the first time. Although it is complicated, I saw it had a clear objective: to ensure the quality of the air no matter where in America one lives, including here. As a resident of Springfield, I am affected by air quality here. But as a resident of Springfield, I am also ultimately an owner of the plant and I feel morally responsible. I want to know that the Illinois EPA is holding CWLP to the highest standards of the Clean Air Act. I am asking the Illinois EPA to hold CWLP accountable to all standards and safeguards under the Clean Air Act in this permit. The Illinois EPA is charged with safeguarding the people it serves. Hold CWLP to all standards under the Clean Air Act and require no-excuses, comprehensive monitoring.

Response:
The air quality in the Springfield area is generally good. It is improving due to the variety of new federal and state regulations that have gone into effect requiring reductions in emissions that impact air quality in Illinois, including Sangamon County. The air quality in the Springfield area reflects the contribution of many sources in

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29 Doctors often prescribe “fast-acting” inhalers so individuals may quickly relieve certain acute asthma symptoms subject to further medical treatment as directed. Other medications delivered by inhalers may also be prescribed to prevent and reduce inflammation of airways and chronic symptoms of asthma. Certain oral medications may also be used in the treatment of asthma.

30 As reported in the most recent Annual Air Quality Report compiled by the Illinois EPA, the quality of the ambient air in Springfield in 2015 was considered moderate and good for 22 and 78 percent of the time, respectively.
addition to the Dallman Station, including cars, trucks and other
vehicles, agricultural activities, roadways, open burning and natural
sources. As the area around Springfield is largely rural, only a
portion of the air quality in the area is attributable to the emissions
of sources that are actually located in the area. The remainder is
attributable to the emissions of sources outside the area, including
sources that may be hundreds of miles away.

Real-time or current data for monitored ambient air quality for ozone
and fine particulate matter, across the country is available from
USEPA’s AirNow internet site.31 Ozone and fine particulate matter are
the pollutants that are generally of greatest concern for ambient air
quality. The Springfield area is one of the sectors in Illinois for
which the Illinois EPA routinely computes Air Quality Index data to
provide the public with a simple assessment of the current air quality
and the air quality that is forecast for the next day. This data is
intended to enable people, especially individuals who are sensitive or
very sensitive to air pollution, to appropriately adjust their daily
activities.

8. Comments Concerning Self-Monitoring and Self-Reporting

I have learned that the Dallman Station on Lake Springfield does not
have a third party monitoring it. If a third party is not watching the
plant, the air might not be very safe for the community to breathe. I
would like the people of Springfield get a permit with a third party to
monitor the coal plant so the environment can be safer.

Response:

Most air pollution control laws and rules require and depend upon
testing, monitoring and reporting by the regulated sources rather
than by government contractors. It is easily within the ability
of CWLP to properly carry out these activities and the Illinois
EPA has no reason to believe that they are not being carried out
properly.

To maintain truth and honesty of the data that sources must
collect and report, failure of a source to truthfully and
honestly collect and report required data is a criminal
violation. As a criminal violation, the source and the
responsible employees are potentially subject to monetary fines
and prison sentences for such failures. Sources that take adverse
actions against employees to prevent or interfere with them from
accurately reporting data or retaliate against employees who
honestly report data may also be subject to penalties.

Because sources are held responsible for collecting and reporting
of data, permits such as this CAAPP permit can impose extensive
monitoring, reporting, recordkeeping and testing requirements on
the source to assure that the underlying applicable requirements
are being met. Such requirements are possible because the source


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is responsible for implementing the requirements, maintaining the personnel, equipment and systems to satisfy those requirements. These requirements also extend to the staff that manage and operate equipment on a day-to-day basis and are most familiar and knowledgeable about equipment.

The Illinois EPA and USEPA, Region V also do conduct periodic on-site inspections of CAAPP sources and other sources in Illinois to review the operation of emission units and the practices used by sources to collect required data and demonstrate compliance. These inspections also serve to facilitate truthful and honest collection and reporting of data by sources and their employees.

9. **Comment on Availability of Emission Data:**

There should also be a way in which the public can access the emission data without doing Freedom of Information Act requests to determine if this continuing monitoring is showing problems. The public should be able to tell when the values are being exceeded, and the permit should be able to let people know that this is happening. I want to make clear that this is a public health issue.

**Response:**

Applicable rules do not provide for CAAPP permits to require real-time reporting of emission monitoring data on the Internet. Moreover, this comment appears to reflect a fundamental misunderstanding about the nature of the emission standards that apply to the boilers at Dallman. These standards are generally set at levels that reflect the levels of emissions that should reasonably never be exceeded by these boilers when appropriate measures are used to control their emissions. The emission standards do not represent the levels of emissions from the boilers at which adverse health impacts might be expected to occur. Accordingly, as individuals have concern for real-time data as related to air quality, such concern is more appropriately directed at real-time data for ambient air quality, as has already been discussed.

10. **Comments Related to Environmental Justice**

According to USEPA's online Environmental Justice Screen, there are about 3,000 people that live within a mile around the plant.32

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I am a member of the environmental committee of the Springfield branch of the NAACP and an impacted Springfield resident. One of the major components of a healthy and just community is clean air. Low income and people of color in Springfield are more likely to suffer from respiratory diseases and the significant health cost associated with treating such illnesses. Springfield residents deserve to breathe clean, healthy air all the time. The NAACP urges the Illinois EPA to strengthen the draft permit. The Illinois EPA must prioritize the health of Springfield residents, especially the most vulnerable residents. I urge the Illinois EPA to consider the devastating impact

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32 About 120,000 people live in Springfield. Nearly 200,000 people live in Sangamon County.

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any deficiencies in the permit would have on low income and communities of color. I ask the Illinois EPA to issue a permit that fully complies with the Clean Air Act.

Response:

Utilizing Illinois EPA’s EJ START demographic screening tool, the Illinois EPA determined that some communities to the west and northwest within one mile of the facility meet the criteria for “potential EJ community.” Accordingly, the Illinois EPA appropriately undertook public outreach for this permit proceeding, including holding a public hearing, as provided for by the Illinois EPA’s Environmental Justice Policy. In response to specific comments on the draft permit that were received during the public comment period, a number of improvements have been made in the revised CAAPP permit that has now been issued.

11. Comments on the Scope, Length and Format of the CAAPP Permit:

a. Comment: The purpose of this CAAPP permit for the Dallman Station is to have information in one place on the pollutants coming out of the plant.

Response: The actual emission of the plant will vary from year. As such, it is not possible for CAAPP permits to provide information for the actual emissions of sources. The actual emissions of the plant are something that CAAPP sources must report in their Annual Emission Reports. In these reports, sources must provide information on their emissions of different regulated air pollutants during the preceding year.

b. Comment: The CAAPP permit is supposed to contain all information such that the public can easily determine if the Dallman coal plant is in compliance or there are any issues at the plant.

Response: The compliance status of the emission units at a source may vary over time. As such, it is not possible for a CAAPP permit to provide information on current compliance status, as suggested by this comment. The compliance status of CAAPP sources is addressed under the CAAPP because it requires sources to submit additional reports related to compliance, in addition to the compliance reports that are required by the rules that apply to the emission units at a source. CAAPP sources are also required to promptly submit notifications for deviations from permit requirements. CAAPP sources are also required to submit reports on annual basis generally summarizing their compliance status for the previous year.

33 Information on the actual emissions of the Dallman Station in recent years, as reported by CWLP in its Annual Emission Report, was provided in the Statement of Basis prepared by the Illinois EPA to accompany the draft of the revised CAAPP permit for the Dallman Station.

34 Even if an emission unit is unable to comply with a particular requirement when a CAAPP permit is issued, changes may occur during the term of the CAAPP permit so that the emission unit comes into compliance.
c. **Comment:**
The format of the permit should make it simpler for people to read. In 1990, when Congress amended the Clean Air Act and started the Title V program, this is what USEPA said about it at the time:

This program, in many ways the most important procedural reform contained in the new law, will greatly strengthen enforcement of the Clean Air Act. It will enhance air quality control in a variety of ways. First, adding such a program updates the Clean Air Act, making it more consistent with other environmental statutes. "The new program clarifies and makes more enforceable a source's pollution control requirements. Currently, a source's pollution control obligations may be scattered throughout numerous hard-to-find provisions of state and federal regulations, and in many cases, the source is not required under the applicable State Implementation Plan to submit periodic compliance reports to EPA or the states. The permit program will ensure that all of the source's obligations with respect to its pollutants will be contained in one permit document, and the source will file periodic reports identifying the extent to which it has complied with those obligations. Both of these requirements will greatly enhance the ability of federal and state agencies to evaluate its air quality situation."

**Response:**
This comment does not support simplification of the CAAPP permit for the Dallman Station. The statement by USEPA quoted by this comment confirms that one function of Title V permits is to compile the various federal and state air pollution requirements that apply to a source into a single document. Another function is to require sources to periodically report their compliance status relative to those requirements. Nothing is said suggesting that Title V permits should in some way serve to simplify applicable requirements so that Title V permits set out those requirements in terms that are understandable by the general public. Indeed, such simplification would result in permits that no longer accurately reflect the applicable requirements and could not be relied upon to facilitate compliance with those requirements, as is intended. In this regard, it is noteworthy that in the quoted material focuses on the benefits of Title V permits for sources themselves, the USEPA and state air pollution control agencies.

d. **Comment:**
In 1990, when Title V of the Clean Air Act was adopted, I was working at the Indiana Department of Environmental Management. In the following years, both from inside and outside of the department, I participated in getting Indiana’s Title V permit program off the ground. Title V permits were billed by USEPA back then as being a major resource for both the regulated sources and the public because there would be one simplified permit that anybody could go to and easily understand. Sources would know if they are in compliance and the public would know if sources are in compliance.

**Response:**
This comment misrepresents the nature of Title V permits. For sources, a key benefit of Title V permits is that all applicable requirements are compiled in a single document. With Title V permits, sources
should no longer be in danger of having missed or not identified applicable regulatory requirements so that their practices unintentionally do not appropriately address those requirements, possibly not being in compliance with those requirements. Similarly, Title V permits also benefit USEPA and state air pollution control agencies, which are responsible for enforcing air pollution control requirements, as the requirements that apply to subject sources are compiled and codified in permit documents that are directly enforceable.

Title V permits also benefit state air pollution control agencies as they provide for enhancements of the compliance procedures that sources must implement to verify compliance with applicable requirements. These enhancements, which also benefit the public include prompt reporting of deviations by sources and annual submittal of reports certifying to their compliance status. These enhancements are beneficial as they act to facilitate compliance and simplify enforcement for noncompliance. However, these benefits from Title V permits do not rely upon Title V permits being easily understood by the public. Rather, they involve actions that subject sources must take as they are subject to the Title V permit program.

e. Comments:

People deserve a permit that is easy to read and understand. This is a public service that Title V permits are supposed to provide.
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In addition to CWLP itself, it is up to a number of parties, including the public, to make sure that Dallman is in compliance. When permits are hard to understand, it is going to be hard to ensure compliance with all of the applicable requirements.
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Regular people do not have the time to read a permit that is 250 pages long and to understand the parameters of what should be happening in their community. Is there any way that this permit could be updated so that regular people can understand what is going on in their communities.
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A 250-page permit is too long
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The draft permit is very large and confusing.
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There is another format that the Illinois EPA have used for CAAPP permits, a more streamlined format, that I would encourage Illinois EPA to go back and look at. This other format would make this permit more streamlined and easier to follow and read.

Response:
These comments did not show that the revised CAAPP permit issued for the Dallman Station should be shorter or have a different format. The subject matter of the CAAPP permit for this source, including the emissions monitoring, emission testing and other compliance procedures, is inherently very complicated. This is largely due to the detailed nature and broad scope of the applicable emission standards that apply to the various emission units at this source. This has necessarily resulted in a permit that is lengthy. For people who are not familiar
with the subject matter of this permit, it also means that that the permit will likely be difficult to understand.

It is highly questionable that changing the format of the permit would result in a permit that would be easier for the public to understand. It is highly questionable that changing the format of the permit would result in a permit that would be easier for the public to understand. There is no question that changing the format at this juncture would have delayed the issuance of the revised permit. It would also make it much more challenging for interested parties to follow the changes that have been made in the permit, both as compared to the previous CAAPP permit for Dallman and as compared to the CAAPP permits that have been issued for other coal-power plants in Illinois. There is also no doubt that switching to the so-called “new format” for CAAPP permits would lead to a CAAPP permit for the Dallman Station that could easily be twice as long as the revised permit that has now been issued. This is because in the new format, the requirements for specific emission units are initially organized by pollutant and then by type of requirement, e.g., emission standard(s), emission testing, monitoring and recordkeeping. In the format used for the CAAPP permits for Dallman and Illinois’ other coal power plants, the requirements for specific unit are initially organized by the type of requirements. For example, all applicable emission standards are identified first.

The Illinois EPA does continue to make efforts to simplify CAAPP permits, both in their structure and language, so that these permits may be more readily understood by all parties, including the public. The new format developed for CAAPP permits is an example of such efforts. For simpler sources, including most manufacturing facilities, the new format generally is a more effective way of organizing a CAAPP permit. However, given the nature of the air pollution control requirements that are being addressed in CAAPP permits, even CAAPP permits in the new format are complex legal documents. It is not reasonable to expect that CAAPP permits will ever become simple documents that members of the general public can read and understand without expending significant effort.

12. Comments Concerning the Delays in Permitting:

I have lived in Springfield for about 28 years. I am concerned that the legal challenge that has delayed the updating of the CAAPP permit and CWLP has been operating for many years without a CAAPP permit. During this time, Unit 4 began operation. Even though CWLP must comply with all applicable requirements, including those not listed in the permit, monitoring and reporting, CWLP may not be conducting monitoring and reporting in a manner that would address compliance with all those requirements because they are not specifically listed in a permit.

35 It should be clearly understood that the Illinois EPA does not find the format of the CAAPP permit for Dallman an impediment to its work overseeing CWLP’s compliance with applicable emission-related requirements. For each category of emission unit at the source, the CAAPP permit provides the emission standards and limits that apply, accompanied by other regulatory requirements and requirements for Periodic Monitoring. Both the format of the current CAAPP permit for Dallman and the “new CAAPP format” lay out applicable requirements for a source in an orderly and logical manner. However, because the coal boilers are subject to emission standards for particulate matter, particulate matter as a surrogate for non-mercury metal HAPs, SO₂, NOₓ, CO, mercury and hydrogen chloride, as well as a standard for opacity, it would take more space using the new format to lay out the applicable requirements for the boilers.
***
I am concerned because CWLP has not acted in an environmentally responsible manner with respect to the monitoring and reporting. This is because of the monitoring and reporting requirements that are not in its current permit. I am not confident that CWLP has been complying because these requirements are not mentioned in its current permit.

Response:
As observed by this comment, the appeal of the initial CAAPP permit for the Dallman Station has not acted to shield CWLP from the emission standards and other emission control requirements that apply to the Dallman Station under applicable rules. In this regard, sources must comply with newly-adopted requirements by the applicable compliance dates regardless of whether those requirements are addressed in a Title V or CAAPP permit. Sources are also subject to enforcement if they do not comply with such newly adopted requirements. In addition, while Boiler 4 has not been addressed by a CAAPP permit, the construction permit for the Dallman 4 project, Permit 04110050, addressed the operation of this project until it was covered by a CAAPP permit, as has now occurred.

CWLP has also taken actions for Dallman to comply with new emission control requirements adopted since the initial CAAPP permit was issued. For example, CWLP now conducts monitoring for emissions of mercury. CWLP has installed natural gas burners systems in the three older coal boilers, replacing the oil burners that were previously used for startup. CWLP has also permanently shut down the two remaining Lakeside Units at the power plant, as required by the construction permit for Dallman Unit 4. Given the various actions that CWLP has taken to comply with new applicable requirements, it is reasonable to believe that CWLP is also implementing the monitoring, recordkeeping and other compliance activities that accompany these new requirements.

13. General Comments Regarding CWLP and the Dallman Power Plant:

a. Comment:
I am concerned because CWLP has not acted in a fiscally responsible manner. After Unit 4 went online, CWLP has continued to operate Units 31 and 32, which are the oldest units and most expensive to operate. I realize this comment is a little outside of the scope of the air permit.

Response:
As observed by the comment itself, this comment concerns fiscal matters, this comment is beyond the scope of this permitting action. However, CWLP has indicated that Unit 4 is dispatched for operation before the other units because it is the least expensive unit to operate. It is also the most efficient and has the lowest rates of emissions. However, the older units must still continue to be operated at times. This is necessary to reliably supply electric power when Unit 4 or Unit 33 is out of service for maintenance and to meet the demand for electricity during periods of high electrical usage.

b. Comment:

37 Boiler 4 was constructed with natural gas burners for startup.
CWLP controls emissions of the boilers, removing pollutants from the flue gases of the boilers, and I am happy about that. But the ash and sludge from the three older boilers is handled wet and deposited in ash ponds. These ponds pose an environmental threat.

**Response:**
Disposal of ash is outside the scope of this permit action under the Clean Air Act. It is addressed by other regulatory programs including regulations recently adopted by USEPA to address management and disposal of coal combustion residuals.

c. **Comment:**
I am concerned because CWLP has continued to operate Boilers 31 and 32 using large amounts of water for cooling and for piping material to the adjacent disposal area. This is not environmentally responsible.

**Response:**
Usage of water is also outside the scope of this permit action under the Clean Air Act.

d. **Comment:**
I am a ten year old Girl Scout concerned about clean air. I wonder, if the people that work at coal power plants know that the plants affect the air, then why do they keep on making the air polluted?

**Response:**
The responsibility for emissions from coal power plants should not simply be placed on the people that operate those plants, as suggested by this comment. Coal power plants help supply the public with the electricity that people use and depend upon for their daily lives. While most of the pollutants generated by burning coal are controlled, it is not possible to eliminate all emissions. This is why it is important that people take actions to reduce their electricity usage, such as using energy efficient heating and lighting systems. Not only does reducing usage of electricity save people money, it also acts to lowers the emissions of coal power plants that provide electricity.

14. **General Comments Regarding the Draft of the Revised CAAPP Permit:**

I have concerns that the draft of the revised CAAPP permit for the Dallman Station would not require CWLP to operate pollution controls as should be required. It also would require CWLP to adequately report and determine the cause of any excess pollution. It also would not have all the reasonable safeguards in place to be in compliance with all the standards under the law. I ask the Illinois EPA fix these shortcomings and issue a permit that complies with the Clean Air Act.

***
I am an organizing representative with the Sierra Club’s Beyond Coal campaign in Illinois, working with communities that are directly impacted by coal plant pollution. I also am a resident of Springfield so I will also be directly affected by this permit. The draft permit is lacking in several ways. When finalizing the permit, I want the Illinois EPA to look at and take care of all of these deficiencies. I want the draft permit's inadequate compliance assurance monitoring program to be fixed to ensure that pollution controls are operated within performance ranges and that any excursions are detected and
corrected. Also, strengthen the draft permit's inadequate testing, inspection and evaluation standards, as well as correct the inadequate recordkeeping and reporting requirements to ensure that CWLP both reports and determines the cause of any excess emissions. As a person with ongoing sinus issues and that is concerned about the air that I breathe, make sure that all the safeguards that fall under the Clean Air Act are being included in this permit.

***
I am concerned that the draft CAAPP for the Dallman coal plant would be deficient in several ways. The Illinois EPA should correct these deficiencies in the issued permit. For example, the Illinois EPA should fix the inadequate Compliance Assurance Monitoring program to ensure that pollution controls are operated within performance ranges, and any excursions are detected and corrected. The issued permit should limit emissions during startup, shutdown and malfunction periods. The draft permit’s inadequate testing, inspection and evaluation standards, as well as its inadequate recordkeeping and reporting requirements, should be strengthened to ensure that CWLP reports and determines the cause of any excess pollution.

***
The Illinois EPA should do better to serve the people of Springfield by enforcing the strongest Clean Air Act possible. It is really important to remember that this permit is holding CWLP up to the Clean Air Act.

Response:
The Illinois EPA appreciates the participation of the individuals who made these general comments in the public comment period for this permit proceeding. This is particularly true as these general comments were accompanied by specific comments on particular provisions of the draft permit, as have already been addressed or will be addressed later in this Responsiveness Summary. However, as explained by the Illinois EPA in the response to those specific comments, there were not broad deficiencies in the draft permit as claimed by these comments.

F. COMMENTS ON SPECIFIC PERMIT CONDITIONS WITH RESPONSES BY THE ILLINOIS EPA

I. Comments Regarding Section 1 of the Permit
(Introduction)

1. Permit Condition: 1.1

Comment:
In Condition 1.1, the Acid Rain Permit ORIS Code "964," the code relating to our Lakeside boiler units, is still included in the permit. These units no longer run and are officially decommissioned. This ORIS code no longer needs to be incorporated in the permit.

Response:
The ORIS Code for the Lakeside boilers are removed in the issued permit.

2. Permit Condition: 1.3
Comment:
Condition 1.3 includes the contact information for environmental employees at CWLP with specific expertise relating to the CAAPP Permit and air pollution control. Please include Larry L. Groth III (Air Quality Engineer/GEMS program manager hired in April, 2014) in this section.

Response:
Larry L. Groth III is included in the identified environmental contacts in Condition 1.3 of the issued permit.

II. Comment Regarding Section 2 of the Permit
(List of Abbreviations/Acronyms Used in This Permit)

1. Permit Condition: 2.0
Related Conditions: 6.4.8(g), 6.5.9(b)(ii)(C), 6.5.9(c)(ii)(B) and 6.4.1

Comment:
The Draft Permit contains undefined terms and unexplained acronyms for which a definition must be provided in order to ensure the terms are clear and enforceable, as required by Title V. See In re Cash Creek Generation, LLC, 2012 EPA CAA Title V Lexis 5 (“One purpose of the title V program is to ‘enable the source, States, EPA, and the public to understand better the requirements to which the source is subject, and whether the source is meeting those requirements’”) (citing 57 FR 32,250, 32,251 (July 21, 1992)).

These include the term “RATA,” used in Condition 6.4.8(g), which is not included in Condition 2.0, List of Abbreviations and Acronyms Used in This Permit, or otherwise defined.

Moreover, the Draft Permit uses the term “excepted” monitoring systems in Section 6.4.1, and it is not clear what “excepted” monitoring systems means. If Illinois EPA means “accepted” monitoring systems, it should include that correction; otherwise, it should clearly explain what “excepted” monitoring systems means.

Response:
The terms RATA (Relative Accuracy Test Audit) used in Condition 6.4.8(g) and PM CPMS (Particulate Matter Continuous Parametric Monitoring System) used in Conditions 6.4.9(b)(ii)(C) and (c)(ii)(B) are included to the listing of terms in Condition 2.0.38.39

38 A Relative Accuracy Test Audit (RATA) involves measuring the emissions of a unit equipped with a continuous emissions monitoring system (CEMS) by testing conducted using an appropriate USEPA Reference Test Method. The monitored data is compared to the results of the testing to confirm that the CEMS meets the performance specifications that are applicable and the CEMS provides acceptable emission data.

39 A Particulate Matter Continuous Parametric Monitoring System (PM CPMS) measures PM emissions as an indicator of compliance with applicable PM standard(s). A PM CPMS is not operated to meet the performance specifications for a PM CEMS. PM CPMS are typically used for emission units for which it may be not be feasible or practical to meet the performance specifications for a PM CEMS.
In the draft permit, the term "excepted monitoring system" in Condition 6.4.1 is correct. This term is used by Illinois in 35 IAC Part 225, as well as by USEPA in the Cross-State Air Pollution Rule (CSAPR), as it references provisions of the federal Acid Rain Program. This term is used to refer to certain alternative approaches to monitoring emissions that are acceptable approaches under these rules. For example, for emissions of mercury under 35 IAC Part 225, sorbent trap monitoring is an acceptable method for monitoring mercury emissions. As the term "excepted monitoring system" is used in particular rules, the meaning of the term is governed by those rules. It would not be appropriate to include a separate explanation for this term in the CAAPP permit.

III. Comments Regarding Conditions in Section 5 of the Permit
(Overall Source Conditions)

1. Permit Condition: 5.2.7

Comment:
Condition 5.2.7(a) incorporates into the draft permit the Permittee's Control Measures Record dated December 12, 2013, and states that

"[a]ny revised version of the Control Measures Record prepared by the Permittee and submitted to Illinois EPA while this permit term is in effect is automatically incorporated by reference. Upon such automatic incorporation, the revised plan replaces the version of the plan previously incorporated by reference."

As written, the draft permit allows for the Control Measures Record to be revised and automatically incorporated by reference into the permit without being reviewed by IEPA or the opportunity for public notice and comment. Thus, the Permittee could make significant changes to control measures that may not assure compliance with applicable requirements. Those changes would then be automatically incorporated into the permit.

40 Sorbent trap monitoring is addressed by USEPA Reference Method 30B, Determination of Total Vapor Phase Mercury Emissions from Coal-Fired Combustion Sources Using Carbon Sorbent Traps.

41 In 35 IAC 225.130, a "sorbent trap monitoring system" is defined as follows,

Sorbent Trap Monitoring System” means the equipment required by this Appendix B of this Part [35 IAC Part 225] for the continuous monitoring of Hg emissions, using paired sorbent traps containing iodated charcoal (IC) or other suitable reagents. This excepted monitoring system consists of a probe, the paired sorbent traps, an umbilical line, moisture removal components, an air tight sample pump, a gas flow meter, and an automated data acquisition and handling system. The monitoring system samples the stack gas at a rate proportional to the stack gas volumetric flowrate. The sampling is a batch process. Using the sample volume measured by the gas flow meter and the results of the analyses of the sorbent traps, the average mercury concentration in the stack gas for the sampling period is determined, in units of micrograms per dry standard cubic meter (μg/dscm). Mercury mass emissions for each hour in the sampling period are calculated using the average Hg concentration for that period, in conjunction with contemporaneous hourly measurements of the stack gas flow rate, corrected for the stack moisture content.
incorporated into the draft permit without the opportunity for review and comment.

Pursuant to Section 39.5(8) of the Act, Illinois EPA must provide notice to the public, including an opportunity for public comment, on each significant modification to a CAAPP permit. Illinois' CAAPP further provides that "every significant change in existing monitoring permit terms or conditions and every relaxation of reporting or recordkeeping requirements shall be considered significant." Section 39.5(14)(c)(ii) of the Act. Additionally, the federal Title V regulations require all permit modification proceedings to provide adequate procedures for public notice and comment except for minor modifications. 40 C.F.R. § 70.7(h). The Permittee's implementation of the control measures contained in the Control Measures Record is essential to achieving and maintaining compliance with the applicable opacity and PM limits. Any change to those control measures must be processed consistent with the appropriate permit modification procedures required by state and federal law, including review by IEP A and opportunity for public comment, as appropriate.

To address this issue, the statement in Condition 5.2.7(a) that automatically incorporates any revisions made to the Control Measures Record should be removed from the permit.

Response:
The approach that is being used to incorporate the Control Measures Record into the CAAPP permit by reference is based on USEPA guidance for Title V permits. This guidance recognizes that Title V permits may incorporate certain types of plans by reference provided that the "incorporation by reference" (IBR) meets certain criteria. Consistent with this guidance, the subject language of the permit was crafted to incorporate by reference certain plans into the CAAPP permit and to provide for the automatic incorporation of subsequent revisions to those plans during the term of the permit into the permit without the need for a formal revision of the permit.

In its first White Paper concerning implementation of the Title V permit program (White Paper 1), the USEPA briefly discussed IBR. This subject was more fully discussed in its second White Paper (White Paper 2). Together with citation and cross-referencing, IBR was recognized as an important tool for efficiently addressing applicable requirements in Title V permits.

Much of USEPA guidance regarding IBR has dealt with the need to be specific and unambiguous with the materials being incorporated [see, White Paper 2, page 40 (IBR may only be allowed "to the extent that the manner of its application is clear.")]. However, in a well-publicized letter written a couple of years after issuance of the

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43 Memorandum, “White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program,” from Lydia N. Wegman, Deputy Director, Office of Air Quality Planning and Standards, dated March 6, 1996 (White Paper 2).
White Papers, USEPA answered a series of questions from the State and Territorial Air Pollution Program Administrators (STAPPA), one of which squarely addressed IBR for various Startup, Shutdown and Malfunction (SSM) and Operating and Maintenance (O & M) plans (STAPPA Letter).\textsuperscript{44} USEPA explained that for those plans that, by virtue of a statute or rule, require incorporation into a Title V permit, IBR of the plans into a Title V permit was necessary. However, USEPA noted that revisions to incorporated plans could be accomplished without formal permit revision if the permit provided that such revisions are automatically incorporated during the term of the permit.\textsuperscript{45}

The STAPPA letter addressed the Startup, Shutdown and Malfunction Plans and the Operation and Maintenance Plans required of certain sources subject to NESHAPs. USEPA also observed that plans under 40 CFR Part 63 not requiring incorporation to a Title V permit “...need not be incorporated by reference, nor must their content be included as permit terms, in order to assure compliance with the relevant part 63 applicable requirements.” For this reopening proceeding, the control measures record is generally akin to various plans that are not required by law or rule to be incorporated into a Title V permit. This is because the basis for requiring the development and maintenance of this record is to support Periodic Monitoring rather than to fulfill independent applicable requirements.\textsuperscript{46} However, the Illinois EPA also recognized that the CAAPP permit requires the source to implement the control measures in conformance with the control measures record. For this reason, the Control Measures Record was incorporated by reference but the permit was crafted to allow for future revisions to be automatically incorporated in the manner set forth by USEPA in the STAPPA letter.\textsuperscript{47} This approach is logical in the sense that the control measures are not applicable requirements per se and the substantive obligation to obtain prior approval from a permit authority is not present in underlying rules. Moreover, this approach maintains reasonable flexibility in the control measures used for material handling operations, consistent with the flexibility provided for by the initial permit, subject to appropriate supervision by the Illinois EPA as any revision to Control Measures Record must be provided to and therefore be available for review by the Illinois EPA.\textsuperscript{48}

\textsuperscript{44} Letter, John S. Seitz, Director, Office of Air Quality Planning and Standards, USEPA, to Robert Hodanbosi and Charles Lagges, STAPPA/ALAPCO, dated May 20, 1999 (STAPPA Letter).

\textsuperscript{45} USEPA reasoned that the approach was in keeping with the underlying regulations in 40 Part 63 for SSM plans “which were promulgated subsequent to part 70 and which contemplate that the source will be able to make changes to the SSM plan without the prior approval of the USEPA or the permitting authority.”

\textsuperscript{46} In this regard, it is noteworthy that the implementation of the control measures identified in the Control Measures Record is not essential to compliance with the applicable opacity and PM limits, contrary to the claim made in this comment.

\textsuperscript{47} It should be noted that this USEPA guidance also does not require permit revisions for revisions to a Title V permit application where the application has previously been incorporated into a Title V permit by reference. See, White Paper 1 at p 23.

\textsuperscript{48} To assure prompt action by the source if the Illinois EPA’s review of a revised Control Measures Record identifies concerns with the revision, a condition has been added in the issued permit. New Condition 5.2.7(a)(ii) now provides that if the source submits a revised Control Measures Record to the Illinois EPA and the Illinois EPA
Notwithstanding the rationale for this initial approach in the draft revised permit, further consideration of this issue has prompted the Illinois EPA, following consultation with CWLP, to modify the subject condition. More specifically, an exception to the broader “incorporation by reference” of the Control Measures Record is created for revisions to the Control Measures Record that involve certain operations. These operations are: 1) Truck unloading to the coal storage piles; 2) Coal storage pile operations; and 3) Fly ash load-out operations. These operations were identified on the basis of their potential for emissions, as they are the only operations addressed by the Control Measures Record whose emissions could, as a practical matter, exceed applicable standards.49 For such operations, changes to the Control Measures Record affecting the nature, application or frequency of the relevant control measures will not be automatically incorporated into the permit but, instead, will require an appropriate permit revision before they can be implemented and maintained. This revision addresses USEPA’s apparent concern regarding the threat of certain control measures changing without the existence of adequate safeguards.50, 51

notifies the source of any deficiency in the revised record within 30 days, the source must respond with relevant additional information or a further revision to the Control Measures Record within 30 days of the written notice of the deficiency.

49 The specified operations were identified based on the information provided in the permit application for emission rates. Of the operations addressed by the Control Measures Record, these operations could have emissions that cause an exceedance of an applicable standard in the absence of control measures. The emission rates of these operations, which are not enclosed, are on the order of 5 to 10 pounds/hour. In comparison, the remaining operations are either located within buildings, underground or otherwise enclosed with maximum uncontrolled emission rates on the order of 0.5 pounds/hour or less. Additionally, it can be noted that there has not been a complaint history for nuisance dust or a history of any violations from any of the operations addressed by the Control Measures Record.

In addition, the notion that every control measure identified in the Control Measures Record is “essential” to compliance, as advanced by the comment, is incongruous with the draft revised permit and the current record. The Illinois EPA has not historically treated the various control measures as necessary to assure compliance with applicable opacity or particulate matter standards. As explained repeatedly in other permit proceedings involving the CAAPP permits for coal-fired power plants, the initial CAAPP permit for this source has only required the use of the Control Measures Record “to support periodic monitoring.”

50 At least part of USEPA’s concern on this issue may be the result of some confusion regarding the use of incorporation by reference for the Control Measures Record. Although the Control Measures Record is newly-incorporated and is enforceable under the CAAPP permit, that is not to say that the record’s independent existence has been rendered obsolete or subordinated to the permitting procedures of the CAAPP. This is because incorporation by reference merely operates to make the object of the incorporation a part of a subject document. It does not affect the origin of, or any subsequent change in, the object so incorporated. For example, a state or federal rule can be incorporated into a Title V permit and thereafter may be enforced as a permit requirement. But what the rule requires, and the manner by which rule can be amended, is outside of the purview of Title V program, as regulations can only be revised through formal rulemaking or action by a court. The Control Measures Record required by this permit is similarly situated. Changes to the Control Measures Record remain at the election of CWLP, not the Illinois EPA, USEPA or the public. If the approach to incorporation by reference cannot be accomplished automatically, as set forth in the draft revised permit (Condition 5.2.7(a)(ii)), the only alternative is to compel the source to seek permit revision to incorporate an amended version of the Control Measures Record.
The condition in the issued permit continues to maintain reasonable flexibility in the control measures used for material handling operations, consistent with the flexibility provided for by the prior permit. In addition, the condition will ensure that any future changes to the Control Measures Record are subject to appropriate supervision by the Illinois EPA, as any such revision must be provided to and therefore be available for review by the Illinois EPA.52

2. Permit Condition: 5.2.7

Comment:
Control Measures Record - This condition incorrectly references the conditions in section "7.7.9 (b)." This should be corrected to "7.7.10 (b)."

Response:
The identified error in cross-referencing the appropriate permit condition is now correct in the issued permit.

IV. Comments Regarding Conditions in Section 6.2 of the Permit
(Section 6.2 - Cross State Air Pollution Rule/Transport Rule (CSAPR/TR))

1. Permit Sections: 6.2
   Related Conditions: 6.2.2(a)(i), (b)(i) and (c)(i), 6.2.3(a), 6.2.4, 6.2.5(a), (b) and (d)

Introduction:
USEPA has identified several concerns with Section 6.2 of the draft permit, "CSAPR/TR Trading Programs". These relate primarily to areas where IEP A has not used the language contained in EPA's May 13, 2015 guidance document entitled 'Title V Permit Guidance and Template for the Cross-State Air Pollution Rule,' or has deviated from the language of the rule. EPA developed this guidance in order to assist states in incorporating applicable TR requirements into Title V permits. The guidance includes a template that can be completed and inserted into a Title V permit in order to ensure that the TR requirements are completely and correctly incorporated. EPA strongly

Measures Record into the permit (See Condition 5.2.7(a)(iii)). As described above, the modified condition will require the source to seek a permit revision to incorporate by reference any changes to the Control Measures Record involving the specified operations. Depending upon the nature of the change, the revision would follow the applicable procedures for administrative amendment, minor modification or significant modification.

52 To assure prompt action by the source if the Illinois EPA's review of a revised Control Measures Record identifies concerns with the revision, a condition has been added to the issued permit. New Condition 5.2.7(a)(iv) now provides that if the source submits a revised Control Measures Record to the Illinois EPA and the Illinois EPA notifies the source of any deficiency in the revised record within 30 days, the source must respond with relevant additional information or a further revision to the Control Measures Record within 30 days of the written notice of the deficiency.
encourages states to use the template. While state permitting authorities are not required to use the template, it does provide the minimum applicable TR requirements that must be included in a Title V permit.

Our specific comments on Section 6.2 of the draft permit are as follows:

**a. Comment:**
For sources subject to CSAPR, there may be multiple owners and operators that are not necessarily named as the Permittee. The term "owners and operators" is consistent with the Federal rule language in 40 CFR Part 97, and will ensure that the appropriate responsible parties are included in the event of any future changes in ownership for this facility. Illinois EPA should replace the term "Permittee" with "owners and operators" throughout Section 6.2.

**Response:**
Throughout Section 6.2 in the issued permit, the term "Permittee" from the draft permit was replaced with the regulatory terms "Owners and Operators" or "Owners or Operators" consistent with the regulatory language.

**b. Comment:**
The template provided by EPA in the May 13, 2015, guidance was structured to provide flexibility for sources subject to CSAPR. By providing the table outlining the multiple monitoring system options, the structure of the template allows for the use of the minor permit modification procedures under Title V if a facility chooses to request an alternative monitoring system. While Illinois EPA is not required to use the template, the structure of Section 6.2 will require a significant modification to the permit to incorporate any future changes to the selected monitoring systems. This would likely result in a conflict between the approved monitoring system under CSAPR and the permit while the significant modification is being processed. The facility will be expected to comply with both the requirements of the approved plan and the requirements of the permit.

**Response:**
The Illinois EPA has not included this language in the issued permit following consultation with CWLP. It indicated that this type of flexibility is not necessary for the EGU's at Dallman. In addition, changes to monitoring systems for NOx and SO2 emissions are likely not possible because of the separate requirements for monitoring under 40 CFR Part 75 of the Acid Rain Program.

**c. Comment:**
Condition 6.2.3(a) of the permit requires CWLP to submit a monitoring plan to the EPA Administrator. This language is similar to the language in paragraph 2 of the "Description of TR Monitoring Provisions" in the template; however, Illinois EPA has not included the link to EPA's website where the monitoring plans can be found. EPA requests that IEP A include the link to ensure that any interested party knows where to find that information.
Response:
The Illinois EPA disagrees that including the address of the website in the permit would ensure that interested parties know where to find these plans. However, the “current” website address where these documents can be found is as follows:

http://www.epa.gov/airmarkets/emissions/monitoringplans.html

There are difficulties with the change to the permit requested by this comment, as discussed below. Accordingly, the Illinois EPA is not making the requested change. However, the Illinois EPA does plan to include the address of the relevant USEPA website in future Statements of Basis for sources that are subject to CSAPR.

- The placement of information on this USEPA website is not an applicable requirement on the Permittee. Should the USEPA not post the documents to their website for whatever reason, the Permittee has no ability to make USEPA post those documents. Moreover, including the address in the permit would require the Permittee to certify compliance for this action that USEPA has voluntarily entered into, i.e., the posting of certain documents that it receives on a website.

- The USEPA may change or update the website so that the specified link becomes obsolete and no longer works. In such circumstances, including a website address in the permit would not benefit interested parties. In addition, if the website link becomes obsolete the Permittee would need to submit an application for a revision to the permit to keep it current and the Illinois EPA would have to process a trivial revision.

d. Comment:
In Conditions 6.2.2(a)(i), 6.2.2(b)(i), 6.2.2(c)(i), 6.2.5(a), and 6.2.5(b), Illinois EPA has used the term "affected unit" instead of "TR NOx Annual Unit," "TR NOx Ozone Season Unit," or "TR SO2 Group 1 Unit." The term "affected unit" is not defined in 40 CFR Part 97. Illinois EPA should use the appropriate term from 40 CFR Part 97 for each condition.

Response:
The Illinois EPA has addressed the use of the terminology “affected units” throughout Section 6.2 as requested by this comment. The issued permit refers to the specific “TR NOx Annual units,” “TR NOx Ozone Season units” and “TR SO2 Group 1 units” at the Dallman Station which are the four coal boilers, 31, 32, 33 and 4. Additionally, the Illinois EPA has provided further clarification of the affected source being defined as a “TR NOx Annual source Trading Program,” the “TR NOx Ozone Season source” Trading Program, and the “TR SO2 Group 1 source” consistent with the regulatory terminology.

53 The Illinois EPA’s experience is that USEPA periodically reworks its websites establishing new links to information and making the former links obsolete.

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e. Comment:
The language of condition 6.2.4 concerning delegated representative deviates from the language of the TR at 40 CFR 97.406(a), 97.506(a), and 97.606(a). EPA requests that Illinois EPA use the language of the rule.

Response:
As requested by this comment, Condition 6.2.4 in the issued permit now uses the relevant regulatory language from 40 CFR 97.406(a), 97.506(a) and 97.606(a).

f. Comment:
It appears that the language in Condition 6.2.5(d) may have been intended to meet the requirements of 40 CFR 97.406(g), 97.506(g), and 97.606(g). If so, the language in the draft permits deviates from the language in the TR. If the intent of Condition 6.2.5(d) was to address these requirements, please revise the condition to incorporate the rule language. If Condition 6.2.5(d) was not meant to address these requirements, please add the appropriate requirements of the TR.

Response:
In response to this comment, the issued permit now includes an additional condition at the end of Section 6.2, Condition 6.2.6, which addresses the relevant requirements of the TR addressed by this comment. A new condition was added because Condition 6.2.5(d) is not intended to address 40 CFR 97.406, 97.506 and 97.606. Rather, Condition 6.2.5(d) addresses Section 39.5(7)(h) of the Illinois Environmental Protection Act (Act) as a requirement of the CAAPP.

g. Comment:
Several provisions of the TR that EPA considers to be minimum requirements for a Title V permit are not included in Section 6.2. To ensure the CAAPP includes the minimum requirements, EPA requests that the following provisions be included in Section 6.2 of the CAAPP permit from the "Description of TR Monitoring Provisions" section of the template:

- 40 CFR 97.406 (d)(1) and (e), 40 CFR 97.506 (d)(1) and (e), and 40 CFR 97.606 (d)(1) and (e).

Response:
The Illinois EPA has included the appropriate references in the issued permit, as requested by the comment, in Conditions 6.2.3(b), (c) and (d) as well as the addition of Condition 6.2.5(e).

V. Comments Regarding Conditions in Section 6.4 of the Permit
(Control of Mercury Emissions from Coal-fired Electric Generating Units (35 IAC 225 Subpart B))

1. Permit Condition: 6.4.8(a)(iii)(D)

Comment:
Draft Condition 6.4.8(a)(iii)(D) incorrectly states that CWLP must report the quarterly mercury mass emissions "(in ounces)." In fact, CWLP reports mercury in lb/GWhr and has never reported mercury emissions in ounces. CWLP reports under 35 IAC 225.230(a), not 35 IAC 225.230(d). This is because under 35 IAC 225.230(a), CWLP is afforded the opportunity to comply with the 0.008 lb/GWhr limit via 35 IAC 225.232, Averaging Demonstrations for Existing Sources.

Response:
As explained in this comment, as related to 35 IAC Part 225, the state rule which limits the mercury emissions of the coal boilers at the Dallman plant, CWLP reports emissions in terms of the standard at 35 IAC 225.230(a)(1)(A) (i.e., 0.008 pounds per gigawatt-hour of electrical output). Pursuant to the related reporting requirements at 35 IAC 225.290(b)(3)(E), CWLP is not required to report quarterly mercury mass emissions in ounces. This is because CWLP is complying with 35 IAC 225.230(a)(1)(A) and not the alternative standard at 35 IAC 225.230(a)(1)(B) (i.e., 90 percent control of emissions). Accordingly, the issued permit does not include Draft Condition 6.4.8(a)(iii)(D).

In fact, CWLP may comply with 35 IAC 225.230(a)(1) by means of 35 IAC 225.230(d). This rule provides that a source that has multiple EGUs, such as CWLP, may show compliance based on the overall emissions of those EGUs rather than for each EGU individually. In the issued permit, new Condition 6.4.4(c) clarifies that CWLP may comply by means of 35 IAC 225.230(d). As CWLP only operates a single coal power plant, CWLP was never eligible to comply by means of 35 IAC 225.232 nor was this ever needed for the Dallman plant given 35 IAC 225.230(d).

2. Permit Condition: 6.4.9

Comment:
I just had one question about the continuous mercury monitoring and I just want to refer to page 35 of the permit, Condition 6.4.9, and this condition says "Compliance with the mercury emission limits of Condition 6.4.4(a) is addressed by continuous emission monitoring." Do you know what continuous emission monitoring that's referencing?

Response:

54 35 IAC 225.290(b)(3)(E) provides that

If the EGU is complying by means of Section 225.230(a)(1)(A), 225.233(d)(1)(A), 225.233(d)(2)(A), or 225.294(c)(1), reporting of the data in this subsection (b)(3)(E) is not required.

55 35 IAC 225.232 provided that the owner or operator of two or more coal power plants could demonstrate compliance with the mercury emission standards based on the overall emissions of the EGUs at those plants. This option is no longer available. Beginning in January 2014, compliance has had to be demonstrated on an individual, plant-by-plant basis.

As discussed, since CWLP only operates a single coal power plant, 35 IAC 225.232 was never applicable for the Dallman plant.

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As addressed at the public hearing, Dallman is currently using sorbent traps for continuous monitoring of mercury emissions.

VI. Comments Regarding Conditions in Section 6.5 of the Permit (Mercury and Air Toxics Standard (MATS) Rule)

1. Permit Condition: 6.5.3(d)

Comment:
Draft Condition 6.5.3(d) states:

Pursuant to 40 CFR 63.10000(b), at all times the Permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Illinois EPA which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

Although the Draft Permit explains what criteria might be used to ascertain whether operation of an affected source is in a manner consistent with safety and good air pollution control practices for minimizing emissions, that is not sufficient. The Draft Permit must delineate specifically what steps the Permittee needs to take in order to operate and maintain the source “in a manner consistent with safety and good air pollution control practices.”

The Draft Permit must include specific, clear, pre-determined obligations for limiting emissions because Title V permits must be enforceable by citizens as well as the state agency. See In re Cash Creek Generation, LLC, Permit No. V-09-006, 2012 EPA CAA Title V Lexis 5, *94-*96 (USEPA June 22, 2012). The Draft Permit’s provision that the determination as to whether the required operation and maintenance procedures are being used is to be based on “information available to the [Illinois EPA]” is not consistent with the requirement that Title V permits be enforceable as a practical matter. This provision indicates that this information may not be available to citizens. As USEPA has explained,

Title V permits must be enforceable as a practical matter... A permit is enforceable as a practical matter (or practically enforceable) if permit conditions establish a clear legal obligation for the source [and] allow compliance to be verified. Providing the source with clear information goes beyond identifying the applicable requirement. It is also important that permit conditions be unambiguous and do not contain language which may intentionally or unintentionally prevent enforcement. USEPA Region 9 Title V Permit Review Guidelines (Sept. 9, 1999), at III-46.

Providing an open-ended and optional list of items that may be used to determine whether the source is complying with this requirement renders the permit requirements vague and subjective and therefore
not enforceable as a practical matter. See In re Cash Creek Generation, LLC, Permit No. V-09-006, 2012 EPA CAA Title V Lexis 5, *94-*96 (USEPA June 22, 2012) (granting petition to object on the grounds that Title V/PSD permit condition was too vague to be enforceable). The requirement that the Permittee must operate and maintain the source “in a manner consistent with safety and good air pollution control practices for minimizing emissions,” is also vague, subjective, and not enforceable as a practical matter. The Draft Permit should therefore be amended to specify clear, measurable and enforceable criteria for ascertaining compliance with Condition 6.5.3(d).

Response:
“General duty” provisions of relevant rules, such as 40 CFR 63.10000(b), are not appropriate for further elaboration or explanation in a CAAPP permit, as is requested by this comment. It is also not appropriate for the CAAPP permit to specify how the Illinois EPA will determine whether it considers the source to have fulfilled the obligations set forth in such provisions. The function of CAAPP permits is to set forth requirements and obligations that apply to sources, not to the Illinois EPA, the USEPA or other interested entities. Accordingly, Condition 6.5.3(d) is proper as it reiterates the regulatory obligations established by 40 CFR 63.10000(b).

It is also noteworthy, as related to certain other comments, that 40 CFR 63.10000(b) provides an example of a USEPA rule that requires a subject source to “minimize” emissions. This obligation is subject to the further qualification that the actions that are required to minimize emissions must be consistent with safety or good air pollution control practice.

2. Permit Condition: 6.5.4(a)(iv)(B)
Related Conditions: 6.5.7(d)-(g)

Comment:
The Draft Permit should require the use of both a mercury continuous emissions monitoring systems (mercury CEMS) and sorbent trap monitoring to monitor mercury emissions. The Draft Permit is not entirely clear as to whether it requires solely sorbent trap monitoring, mercury CEMS monitoring, or both. See, e.g. Draft Permit at Condition 6.5.4(a)(iv)(B), Applicable Monitoring and Testing Requirements (“the Permittee uses a continuous monitoring system to monitor emissions of mercury and SO2.”); Draft Permit at Condition 6.5.4(a)(ii) (“The Permittee shall monitor emissions of mercury from affected EGU’s using a sorbent trap monitoring system in accordance with 40 CFR 63.10010(g), 63.10020(a through (d), and Appendix A to 40 CFR Part 63 Subpart UUUUU.”); (Draft Permit at Conditions 6.5.7(d)

56 As a general matter, the Illinois EPA would use its expertise and experience to determine whether the source has met the general obligations established in 40 CFR 63.10000(b). This would most commonly be expected to occur in relation to exceedance(s). In an enforcement action for exceedance(s) of an emission standard in the MATS rule, in addition to violation(s) of that standard, a “second” violation involving 40 CFR 63.10000(b) could also be alleged if the exceedance(s) appears to be the result of inadequate maintenance or poor operating practices by the source.
Even though sorbent trap monitoring can be helpful in addition to CEMS to capture multiple species of mercury (beyond gaseous mercury, which is registered by CEMS), CEMS provide more consistent data evaluating daily and hourly performance. Thus, the permit should require reporting of CEMS data on top of the plant’s mercury sorbent trap monitoring, especially given that the Draft Permit already contains reporting requirements that apply to the mercury CEMS. In addition to calling for mercury sorbent trap monitoring, the Draft Permit should be revised to require mercury CEMS to monitor mercury emissions at the Station.

Response:
The comment suggests that two different types of monitoring systems for mercury emissions should be used at the plant, i.e., mercury CEMS and sorbent trap monitoring systems for mercury. However, only sorbent trap monitoring systems are used by CWLP. Sorbent trap monitoring systems are a type of continuous monitor system for mercury emissions. In this regard, Condition 6.5.4(iv)(B) indicates that the source uses continuous monitoring systems for mercury. This condition does not indicate that the source uses continuous emissions monitoring systems (CEMS) for mercury.

As observed by the comment, a sorbent trap system does not provide hour by hour emission data like a “conventional” mercury CEMS. However, sorbent trap systems for mercury are subject to Quality Assurance and Quality Control requirements for reliability of collected emissions data. While sorbent traps measure mercury emissions over longer periods of time than CEMS, they are an acceptable method of monitoring mercury emissions under both the MATS rule and Illinois’ rules at 35 IAC Part 225.

A CAAPP permit must include monitoring necessary to assure compliance with applicable requirements. The comment does not identify any applicable rule that requires the use of both a mercury CEMS and a sorbent trap system to demonstrate compliance with the applicable emission standards for mercury. Indeed, the comment acknowledges that the relevant rules do not mandate the use of CEMS and provide for an alternative method of monitoring, i.e., sorbent trap systems. The comment has not demonstrated that mercury CEMS, with emission data collected on an hour by hour basis, is essential to demonstrate compliance with the applicable limits for mercury. (Again, the comment acknowledges that sorbent traps are an acceptable approach for monitoring mercury emissions). As such, the comment does not show that use of a mercury CEMS is an applicable requirement or is otherwise needed to assure compliance with an applicable standard or limit.

As a result of this comment, to clarify the intent of reporting requirements in Condition 6.5.7 associated with continuous
monitoring systems the phrase "any applicable" or "any required" was inserted in Conditions 6.5.7(d) through (g).

3. Permit Condition: 6.5.7(a)(i)

Comment:
Condition 6.5.7(a)(i) of Draft Permit states that, pursuant to federal regulations for Mercury and Air Toxics Standards, CWLP must provide periodic test notifications pursuant to 40 CFR 63.7(b), 63.9(e), and 63.10030(d) at least 30 days prior to the start of test. However, 40 CFR 63.7(b)(1) and 40 CFR 63.9(e) require the permittee to provide notification at least 60 days prior to the commencement of the relevant tests. Thus, the 30-day advance notice requirement in Condition 6.5.7(a)(i) contradicts federal law. Earlier notification will ensure adequate time for review of the site-specific test plans before they are approved. Thus, Illinois EPA should revise the Draft Permit to correct this error.

Response:
As originally adopted, 40 CFR 63.7(b)(1) would suggest a 60 day advance notification is required for performance tests under the MATS rule. However, this conflicts with the 30 day notification requirement in 40 CFR 63.10030. In recent technical corrections to the MATS rule, the USEPA corrected this error, revising Table 9 of 40 CFR 63 Subpart UUUUU, which addresses the applicability of the requirements 40 CFR Subpart A for sources subject to the MATS rule. The MATS rule now provides that 40 CR 63.7(e)(1) is not applicable for purposes of the MATS rule. Rather 40 CFR 63.9 is applicable, except for the provision for 60-day advance notification prior to conducting a performance test in 40 CFR 63.9(e). Instead, the 30-day notification period per 40 CFR 63.10030(d) applies. [81 FR 20174 and 20202, April 6, 2016]

4. Permit Condition: 6.5.8(a)(i)

Comment:
This condition incorrectly states that CWLP has elected to operate under paragraph (1) of the definition of startup in 40 CFR 63.10042. CWLP has actually elected to use Paragraph (2) of the definition and to operate according its requirements.

Response:
In the issued permit, Condition 6.5.8(a) now indicates that CWLP has elected to use paragraph (2) of the definition of startup in the MATS rule. This condition also indicates that CWLP may switch to paragraph (1) of this definition in accordance with the procedure specified at 40 CFR 63.10030(e)(8)(iii)(A) through (E).

VII. General Comments Regarding Provisions for Startup, Shutdown and Malfunction of the Boilers in Sections 7.1, 7.2 and 7.3 of the Permit

1. Permit Conditions: 7.1.3(b) and (c), 7.2.3(b) and (c) and 7.3.3-3(e) and (f)
**Comment:**

The reopening of this permit comes after the NRDC v. EPA decision and after EPA’s issuance of a final rule invalidating all SSM affirmative defenses in state SIPs. Nonetheless, this Draft Permit still contains provisions that violate USEPA’s updated SSM requirements in three key ways. First, Conditions 7.1.3(c), 7.2.3(c), 7.3.3-3(f) grant CWLP the authority to continue operating the applicable units at the Dallman Station during periods of malfunction despite emissions exceedances, and provides a corresponding affirmative defense to injunctive relief for exceedances during those periods. Pursuant to Nat. Res. Def. Council, 749 F.3d at 1063, and USEPA’s new SSM rule, this condition is not permissible under the Clean Air Act and Illinois EPA should therefore remove it from the Permit.

Second, contrary to USEPA’s new SSM rule, Conditions 7.1.3(b), 7.2.3(b), and 7.3.3-3(e) of the Draft Permit create a complete bar to enforcement of exceedances during periods of startup, granting Dallman authority to exceed its emission limits during startup of the facility. This condition should also be removed from the Dallman Station's Permit.

Third and finally, even assuming an affirmative defense to penalties were lawful (it is not, as discussed herein), the permit runs contrary to published USEPA standards for determining when a facility may be eligible for an affirmative defense to statutory penalties. USEPA has published recommended criteria delineating when a facility may qualify for an affirmative defense to statutory penalties. See Steven A. Herman & Robert Perciasepe, USEPA, State Implementation Plans: Policy regarding Excess Emissions during Malfunctions, Startup, and Shutdown (hereinafter “USEPA 1999 Policy”), at 3-4 (Sep. 20, 1999) Those criteria include a test to determine if an event qualifies as a malfunction, which provides that malfunctions must not be part of a pattern or stem from an avoidable event, and must be resolved as quickly as possible while minimizing impacts on air emissions. Id. USEPA also provides that excess emissions during startup must not be part of a pattern or stem from an avoidable event. Id. at 5-6. The Draft Permit deviates significantly from these criteria, opening up the possibility that the Station might be improperly granted an affirmative defense. For instance, the Draft Permit authorizes continued operation of both the coal-fired boilers and coal handling equipment during malfunctions where “necessary to provide essential service or to prevent injury to personnel or severe damage to equipment.” See Condition 7.1.3(c)(i) and 7.2.3(b)(i). The Draft Permit includes no provision requiring that malfunctions not be part of a pattern or stem from an avoidable event, or that they be resolved as quickly as possible while minimizing impacts on air emissions. Similarly, the Draft Permit’s authority to exceed emission limits during startup requires only that the applicant take “all reasonable efforts ... to minimize startup emissions, duration of individual startups and frequency of startups.” See Condition 7.1.3(b)(i). Nowhere does the Draft Permit require that any exceedances during startup not be part of a pattern or stem from an avoidable event.
Although the Draft Permit mimics provisions in Illinois’s existing SSM SIP, in USEPA’s proposed SSM SIP Call Rule, USEPA has already found that Illinois’s SSM provisions are inconsistent with the Clean Air Act:

The USEPA believes that the inclusion of the complete bar to liability, including injunctive relief, the availability of the defense for violations during startup and shutdown, the burden-shifting effect, and the insufficiently robust qualifying criteria in 35 IAC 201.261, 35 IAC 201.262, and 35 IAC 201.265, are substantial inadequacies and render these specific SIP provisions impermissible.

78 FR 12,460 at 12,514-15.

Furthermore, USEPA has subsequently re-drafted its proposed SIP Call rule to be consistent with Nat. Res. Def. Council, issuing a supplemental notice of proposed rulemaking that explicitly held that any defenses for emission exceedances during SSM events is unlawful:


On May 22, 2015, USEPA finalized these changes, revising its guidance to make clear that affirmative defense provisions are not permissible in SIPS; and issuing SIP calls directing 23 statewide and local jurisdictions, including Illinois, to remove affirmative defense provisions from their SIPS. USEPA, State Implementation Plans: Response to Petition for Rulemaking; Restatement and Update of EPA’s SSM Policy Applicable to SIPS; Findings of Substantial Inadequacy; and SIP Calls to Amend Provisions Applying to Excess Emissions During Periods of Startup, Shutdown and Malfunction (May 25, 2015).

As such, in order to ensure that the Dallman Station's CAAPP permit remains consistent with Clean Air Act requirements, the Draft Permit must be revised to allow the public to hold CWLP directly accountable any time the facility emits large amounts of excess emissions, including periods of SSM.57

Response:

57 In any event, the Draft Permit should clarify that any finding by Illinois EPA that emission exceedances qualify for a variance under the permit’s SSM provisions does not preclude either a USEPA enforcement action or a citizen suit pursuant to the CAA, for the reasons given above.

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The comment does not support the changes to the CAAPP permit for the Dallman Station that it recommends. As observed by this comment, the appropriate approach to SSM events for SIP emission limitations is a subject that USEPA has addressed in its SSM Rule or “SIP Call.” Provisions of approved SIPs are not directly altered by the SIP call. USEPA clearly recognized this provision in the SIP case stating:

When the EPA issues a final SIP call to a state, that action alone does not cause any automatic change in the legal status of the existing affected provision(s) in the SIP. During the time that the state takes to develop a SIP revision in response to the SIP call and the time that the EPA takes to evaluate and act upon the resulting SIP submission from the state pursuant to CAA section 110(k), the existing affected SIP provision(s) will remain in place.

80 FR 33840 (June 12, 2015)

The SIP Call requires appropriate rulemaking by affected states and jurisdictions, not source-by-source actions during permitting. In this regard, as discussed in this comment, USEPA has reconsidered the provisions that address the potential for “excess emissions” during SSM in the SIPs of a number of states and local jurisdictions, including Illinois’ SIP. USEPA has now found that many of these existing SIP provisions, including the relevant provisions of Illinois rules dealing with startup and malfunction and breakdown events, which USEPA had previously approved, are inconsistent with provisions of the CAA. Accordingly, USEPA has issued the SIP Call, which requires those affected states and local

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58 Illinois’ SIP, as codified at 35 IAC 201.149, prohibits startup (S) of an emission unit or continued operation of an emission unit during malfunction or breakdown (MB) if such operation would cause a violation of an applicable state emission standard absent express permit authorization. 35 IAC 201 Subpart I sets forth a two-step process for addressing compliance with state emission standards during SMB. The first step consists of obtaining authorization by means of a permit application to make a future claim of SMB. The second step involves making a viable claim of SMB. For startup, this consists of showing that all reasonable efforts have been made to minimize emissions from the startup event, to minimize the duration of the event, and to minimize the frequency of such an event. For MB, this consists of showing that continued operation was necessary to prevent injury to persons or severe damage to equipment, or was required to provide essential services. Inherent in this showing is the obligation to show that operation with excess emissions occurred only to the extent necessary.

The City of Springfield sought SMB authorizations for certain units at the Dallman Station. The Illinois EPA reviewed these requests and, as appropriate, granted authorizations in the CAAPP permit to make claims of SMB. These authorizations do not equate to an “automatic exemption” from otherwise applicable state standards. These authorizations are fully consistent with long-standing practice in Illinois for permitting and enforcement. In particular, the nature of the coal-fired utility boilers is such that certain excess emissions may occur during SMB that a source cannot reasonably avoid or readily anticipate. However, the source may be held appropriately accountable for excess emissions that should not have occurred regardless of the authorizations in the CAAPP permit related to SMB. In summary, the provisions in the CAAPP permit related to SMB do not translate into any advance determinations related to actual occurrences of excess emissions. Rather, they provide a framework whereby the City of Springfield is now provided with the ability to make a claim of SMB, with the viability of any such claim subject to further review.
jurisdictions to undertake rulemaking to appropriately revise their SIPs so that SSM events are appropriately addressed.®

Moreover, the USEPA does not mandate in the SIP Call that the current short-term emission limitations in the affected SIPs be made applicable at all times, as implied by this comment. Rather, the SIP Call requires that SIPs be revised so that they appropriately address SSM events. USEPA recognized that a number of different approaches may be possible and appropriate to address various types of emission units and their possible circumstances. One possible approach recognized by the SIP Call is the adoption of “alternative emission limitations” for SSM events.® The adoption of alternative emission limitations, as contemplated by the SIP Call, would be a task that would be carried out through rulemaking. In Illinois, this rulemaking would involve a proceeding before the Pollution Control Board in which the Illinois EPA, the affected sources and interested members of the public could all participate. In other words, while it is correct that certain provisions of Illinois’ SIP dealing with SMB events have now been found by USEPA to be inconsistent with the Clean Air Act, altering these regulatory provisions must proceed through the rule of law. As such, the proper response is rulemaking to correct the now-identified flaw in these provisions that were the result of earlier rulemaking. The SIP call will not affect the requirements of this CAAPP permit until after Illinois acts to develop and put into place revisions to Illinois’ SIP that respond to the SIP call.®

It is also noteworthy that the SIP call is not based on a quantitative evaluation by USEPA of the impacts on ambient air quality of extra emissions during SSM events. Rather, the SIP call is based on a reassessment of the language of the Clean Air Act by USEPA, as guided by various court decisions related to SSM events.®

® Parallel with its SIP Call related to SSM events and its work with affected states and other jurisdictions on revisions to their SIPs, USEPA is also committed to undertaking rulemaking to revise a number of emission standards that it adopted. These standards must also be revised so they appropriately address emissions during SSM

® For purposes of the SIP Call, an alternative emission limitation is,

... an emission limitation in a SIP that applies to a source during some but not all periods of normal operation (e.g., applies only during a specifically defined mode of operation such as startup or shutdown). An alternative emission limitation is a component of a continuously applicable SIP emission limitation, and it may take the form of a control measure such as a design, equipment, work practice or operational standard (whether or not numerical).
80 FR 33842 (June 12, 2015)

® As with many USEPA rulemakings related to the Clean Air Act, the SIP Call is the subject of an appeal filed with the U.S. Court of Appeals in the District of Columbia, though it is too early to determine what effect this lawsuit may have on the timing or the effectiveness of the SIP Call.

® In the SIP Call, USEPA addressed the implications of the SIP Call for air quality in its response to certain comments that opposed the SIP Call because USEPA had not demonstrated that the provisions at issue in the SIP Call have contributed to specific violations of air quality standards or caused harm to public health or the environment.

As explained in the February 2013 proposal, the Supplemental Notice of Proposed Rulemaking and this document, the USEPA does not interpret its authority under Section
In addition, this comment has not provided any information to support the claim that the emissions of coal-fired power plants associated with SSM events are significant.

As a final point, notwithstanding representations made in this comment, the Illinois SIP contains no special provisions dealing with applicability of SIP emission limitations during shutdown of emission units. Accordingly, there are actually not any provisions in Illinois’ SIP related to shutdown of emission units that need to be changed as a result of the SSMM SIP Call.  

2. Permit Conditions: 7.1.3(b) and (c), 7.2.3(b) and (c), and 7.3.3-3(e) and (f)

Comment:
Even if the underlying Illinois SSM SIP were lawful (which as discussed above, it is not), this Draft Permit still would fail to comply with those SIP provisions because it fails to provide guidance for what sort of malfunctions or startup events might justify exceedances. This problem recurs several times, in both the startup and the malfunction and breakdown sections of the Draft Permit.

In the context of malfunctions, the Draft Permit’s key failure is that it does not describe what sort of malfunctions can justify exceedances of applicable air standards. In particular, the Draft Permit fails to explain what “essential service” would justify continuing to operate the facility during a malfunction. See Draft Permit at Conditions 7.1.3(c)(i), 7.2.3(c)(i), 7.3.3-3(f)(i). Without limiting the set of “services” that a plant operator could use to justify continued operation, Illinois EPA runs the risk of allowing the Draft Permit’s exemptions to render its limits on operating during malfunction events essentially meaningless.

110(k)(5) of the Clean Air Act to require proof that a deficient SIP provision caused a specific violation of the NAAQS at a particular ambient monitor on a particular date, or that a deficient SIP provision undermined a specific enforcement action.

Section 110(k)(5) explicitly authorizes the EPA to make a finding that a SIP provision is substantially inadequate to “comply with any requirement of” the CAA, in addition to the authority to do so where a SIP is inadequate to attain and maintain the NAAQS or to address interstate transport. In light of the court’s decision in NRDC v. EPA, the EPA has reexamined the question of whether affirmative defenses are consistent with CAA requirements for SIP provisions. As explained in this action, the EPA has concluded that such provisions are inconsistent with the requirements of section 113 and section 304. 80 FR 33859 (June 12, 2015)

It should also be recognized that the permit conditions challenged by this comment, like conditions challenged by several other comments, are not within the scope of the revisions to the permit that were planned in this “reopening proceeding.” Effectively, this comment challenges the validity of certain conditions in the 2013 CAAPP permit that implemented Illinois rules for startups and malfunction/breakdown events. The current proceeding is governed by the applicable requirements of Title V and Illinois’ CAAPP program, which act to limit the scope to the revisions that would be made to the CAAPP permit in this proceeding.

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This problem is also prevalent in the startup provisions, where the permit purports to establish a “continuing obligation to demonstrate that all reasonable efforts are made to minimize startup emissions, duration of individual startups and frequency of startups.” Draft Permit at Conditions 7.1.3(b)(i), 7.1.3(b)(i), 7.3.3-3(e)(i). The same analysis applies to this provision as elucidated above.

Response:
This comment does not support changes to the permit that have been generally requested. As discussed, the CAAPP permit for the Dallman Station implements provisions of Illinois’ rules dealing with SMB events that are currently part of Illinois’ approved SIP. These rules do not require permits to include “guidance for what sort of malfunctions or startup events might justify exceedances.” The rules lay out a process for addressing startup and malfunction and breakdown events that involves two steps. The first step consists of seeking authorization by means of a permit application to prospectively make a claim related to malfunction/breakdown or startup. This step occurs during permitting. However, the second step of Illinois’ process for operation with excess emissions during malfunction or breakdown or startup occurs outside of a permit. This step addresses the showing that must be made when such an event actually occurs to make a viable claim of malfunction/breakdown or startup. The second step provides the case-by-case determinations for particular events that this comment effectively seeks to have included in the permit.

The underlying concern expressed by this comment is whether violations of emission limits that might occur at Dallman would be “justified.” Consistent with the relevant rules, this is a matter that is appropriately concretely addressed in the context of potential enforcement for actual violations, not speculatively in the context of possible violations. In this regard, the additional provisions in the CAAPP permit that are generally requested by this comment are in direct contradiction to earlier comments by this commenter. The earlier comments argued that no exceedances of state emission standards during SSM should be condoned by the CAAPP permit for the Dallman Station. In this comment, further specificity is now requested on exceedances during SSM that might be justified. Comments have requested that

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64 This first step enables conditions to be placed in permits that require source- or unit-specific recordkeeping and reporting relating to malfunction/breakdown and startup events and other requirements related to such events.

65 For malfunction/breakdown, this showing consists of a demonstration that operation was necessary to prevent injury to persons or severe damage to equipment, or was required to provide essential services. There are two elements to the required showing, “need” and “function”. For startup, it shall consist of a demonstration that all reasonable efforts have been made to minimize emissions from the startup event, to minimize the duration of the event, and to minimize the frequency of such events. To a certain extent, this showing may be evaluated on past practice. However, this showing is also prospective, like the showing for malfunction/breakdown, as it relates to future events, which and whose exact circumstances are not known, and which, in fact, may not routinely occur. Again, the malfunction/breakdown or startup authorization that would be provided in the Revised Permit would not preclude appropriate enforcement for violations of state emission standards during such events.
the CAAPP permits explicitly provide that they do not preclude enforcement by parties other than the State of Illinois. This comment now requests that provisions be included in the permit that would act to impede the success of such enforcement. However, it would be improper to include such provisions in the permit as it would be contrary to the provisions of the relevant state rules addressing emission exceedances during startups and malfunction events. It would also potentially hinder appropriate enforcement by the State of Illinois for such exceedances.

The changes requested by this comment would also require the Illinois EPA to address matters that as a practical matter are beyond the scope of permitting. If as a purely theoretical matter the Illinois EPA were to attempt to address potential violations of emission standards due to startups or malfunction events in permitting, the Illinois EPA would at a minimum need to speculate on the potential range and nature of those violations. Given that malfunctions and breakdowns are not planned and the circumstances that cause exceedance during startup may also be unplanned, such effort would be unlikely to meaningfully address such events. They certainly would be far less effective than addressing such events in the context of potential enforcement.

This comment also does not identify a deficiency in the conditions of the permit that deal with SMB as compared to the relevant provisions of Illinois’ current SIP that address SMB. As related to use of the term “minimize,” the discussion in the Statement of Basis referred to by this comment addressed certain planned changes to the wording of various permit conditions related to control measures for material handling and processing operations. The discussion does not address conditions of the permit that deal with SMB and the provisions in Illinois’ current rules for SMB. For the proposed changes to the conditions that were being addressed, it was appropriate that the term “minimize” be removed since the usage of this term did not have a basis in

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To fully address in a permit whether future exceedance might be justified, the Illinois EPA would also need to speculate on the circumstances in which such violations would occur. It would also need to consider possible actions or lapses by the source that contributed to the particular violations or the magnitude of the violations. The Illinois EPA would need to consider how violations should be approached if there were previous similar violations or a pattern of violation and how such similar violations or pattern of violations should be identified. This would require consideration of the actions that the source might or might not have taken in response to earlier violations. Even then, the Illinois EPA could not address future improvements in technology during the term of the permit that might be relevant to reducing the magnitude of excess emissions or eliminating exceedances entirely.

The discussion in the Statement of Basis referred to by this comment addresses Conditions 7.2.6(a)(i), 7.3.6(a)(i) and 7.4.6(a)(i). These conditions address the measures that are used for control of particulate matter emissions from coal handling operations, coal processing operations and fly ash handling operations. These conditions do not involve SMB events.
regulations. However, this does not show that the term "minimize" is not appropriate when addressing startup and malfunction and breakdown events. In this regard, the relevant rules, 35 IAC 201.261 and 201.262, specifically provide that sources must take actions to "minimize" startup emissions and excess emissions from malfunction and breakdown events. Given the subject addressed by these rules, it would not be inappropriate to construe the term minimize to mean that a source must take all reasonable efforts to reduce excess emissions. Likewise, when addressing malfunctions and breakdowns it is appropriate to use the term "essential services" as this term is used in 35 IAC 201.262. This term does not merit further elaboration in the permit. The term is readily understood as a service that is important and cannot be provided by another party or at a later time. Disagreement about its meaning should be considered in the context of specific events and the potential need for enforcement.

3. Permit Conditions: 7.1.3(c)(ii), 7.2.3(c)(ii), 7.3.3-3(f)(ii) and 7.3.5(a)(iv)

Comment:
The Illinois SIP at 35 IAC 201.262 allows the Permittee to receive Illinois EPA approval to continue operation of an affected operation in violation of applicable requirements in the event of a malfunction or breakdown only if the Permittee submits proof to Illinois EPA that: such continued operation is necessary to prevent injury to persons or severe damage to equipment; or that such continued operation is required to provide essential services. The Illinois SIP at 35 IAC 201.261 requires a source to apply for this authorization in its Title V application, and requires the source to

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68 The sentence in the Statement of Basis referred to by this comment stated that "the word 'minimize' is ambiguous and usually lack regulatory meaning." Upon reflection, this statement was improper as it made a generalization and flawed as that generalization was not correct. The sentence should have simply stated that in the specific conditions that were being addressed, the term "minimize" was being removed as its meaning was potentially unclear, especially as it did not have a regulatory basis. In this regard, "minimize" can mean "to reduce to the smallest amount possible" or simply "to reduce." In the subject conditions, the second meaning was intended (i.e., control measures for the units that were being addressed must be implemented as necessary to reduce emissions to provide for compliance). However, in the absence of a regulatory context, the term minimize could have been incorrectly understood to have the first meaning. This clearly could have not been intended in these conditions as the CAAPP does authorize requirements that act simply to require that emission be reduced to the greatest extent possible independent of any applicable regulatory requirement that applies to those emissions. However, changes to the subject conditions were planned to avoid potential misunderstanding.

69 35 IAC 201.262 does indicate that "continued operations solely for the economic benefit of the owner or operator" shall not be considered providing essential service. It should also be recognized that the challenge to certain permit conditions made by these comments are outside the scope of this reopening proceeding. These comments broadly challenge the basis for conditions in the 2013 CAAPP permit that implement Illinois rules for startups and malfunction/breakdown events. However, the Illinois EPA did not propose to revise these conditions in this reopening proceeding. This proceeding is governed by the applicable requirements of Title V and Illinois’ CAAPP program, which act to limit the scope to the revisions that would be planned to the CAAPP permit.

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include in its application, among other things, "all measures, such as use of off-shift labor or equipment which will be taken to minimize the quantity of air contaminant emissions and length of time during which such operation will continue."

These SIP requirements are reflected in, among others, draft permit Conditions 7.1.3(c)(ii), 7.2.3(c)(ii), 7.3.3-3(f)(ii), and 7.3.5(a)(iv). These Conditions state that upon occurrence of excess emissions due to malfunction or breakdown of an affected operation, the Permittee shall "as soon as practicable" repair the affected operation, remove the affected operation from service or undertake other action so that excess emissions cease. However, the term "as soon as practicable" is not defined in the draft permit, which renders the above permit Conditions practically unenforceable.

As USEPA has previously explained, the term "as soon as practicable," as used in the context of the above permit conditions, must have a specified time limit for it to be practically enforceable. See In the Matter Of Midwest Generation, LCC Waukegan Generating Station, Petition Number V-2004-5 (Order on Petition), September 22, 2005, at 11-13. In that Petition Order, EPA determined that because the challenged permit specifically "[provided] 24 hours or noon of the Illinois EPA's next business day, unless an extension has been obtained, as the maximum time permitted to reduce boiler load, repair the affected boiler, or remove the affected boiler from service so that excess emissions cease, "as soon as practicable" has boundaries which makes the term practically enforceable." !d. at 13.

As written, the draft permit's use of the terms "as soon as practicable," in the Conditions identified above do not include boundaries or definitions as described in the Waukegan Petition Order. Illinois EPA must revise the draft permit to define the term "as soon as practicable" by including specific time limits by when the Permittee must take corrective actions to make the term practically enforceable.

Response:
The comment expresses the concern that the "as soon as practicable" phrase from the cited permit conditions is not practically enforceable. The comment points out that a 2005 petition response relating to a 2003 draft permit for the Waukegan Generating Station previously addressed the same issue. In that instance, the Administrator observed that the "as soon as practicable" phrase in the challenged condition was accompanied by a specified time limit. 71

71 Specifically, Condition 7.1.3(c)(ii) of the 2003 draft Waukegan permit provided:

Upon occurrence of excess emissions due to malfunction or breakdown, the Permittee shall as soon as practicable reduce boiler load, repair the affected boiler, or remove the affected boiler from service so that excess emissions cease. Unless the Permittee obtains an extension from the Illinois EPA, this shall be accomplished within 24 hours* or noon of the Illinois EPA’s next business day,* whichever is later. The Permittee may obtain an extension for up to a total of 72 hours* from the Illinois EPA, Air Regional Office unless extraordinary circumstances exist...
At that time, the Administrator reasoned that the time limit of the condition provided boundaries to the “as soon as practicable” phrase, thus making it practically enforceable. As the current permit for Dallman does not contain the same time limit in its conditions as the earlier version of the Waukegan permit, the comment recommends inclusion of time limits for corrective action to ensure practical enforceability of the subject condition.

The cited 24 hour time period in the malfunction and breakdown condition in the 2003 draft Waukegan permit did not become part of the condition of the permit issued in September 2005. It also did not become part of the initial permits issued to Dallman or the other coal-fired utilities in September 2005. This aspect of the draft conditions for malfunction and breakdown was not carried over into the issued permits. This was a consequence of refinements to these conditions made by the Illinois EPA in response to public comments generally addressing the SMB authorizations in the permit. In this regard, the February 7, 2006, Responsiveness Summary for the Waukegan permit addressed the changes that were made between the draft and issued permits. Notably, it explained that the approach in the issued permits simplified the permits’ malfunction and breakdown provisions by “removing details that might suggest that these authorizations provide greater advance authorization for excess emissions than is possible under Illinois’ regulations.” In addition to other changes, the permit’s language providing for extensions of authorized events was removed in its entirety out of concern that such provisions might appear to constitute authorization by the Illinois EPA for an “acceptable” duration for certain malfunction or breakdown events, foreclosing any enforcement for such events. The 24-hour time period referred to in the Waukegan petition response was in the part of the provision that was not carried over into the issued permit. It was removed so that the permit would better address the underlying rules.

* For this purpose and other related provisions, time shall be measured from the start of a particular incident. The absence of excess emissions for a short period shall not be considered to end the incident if excess emissions resume. In such circumstances, the incident shall be considered to continue until corrective actions are taken so that excess emissions cease or the Permittee takes the boiler out of service.

72 As noted, similar changes affecting malfunction and breakdown events had been made by the Illinois EPA to the other coal-fired utility permits issued in September 2005. 73 Responsiveness Summary for Midwest Generation, LLC, Waukegan Generating Station, dated February 7, 2006, at page 25. 74 Id. at pages 25 and 28. 75 In this petition response, USEPA was not actually responding to a petition to object to a CAAPP permit. Even though the Illinois EPA had not issued the CAAPP permit, this petition was filed with USEPA because the statutory deadline for filing such a petition is based on a step in the processing of a CAAPP permit other than the actual issuance of the CAAPP permit. 76 An earlier approach of the draft permit also attempted to define the parameters of the permit authorization for malfunction and breakdown in relation to compliant periods of operation following such events. The issued permit sought to simplify matters by removing language relating to the duration of certain incidents (i.e., absence of excess emissions for a short period). The Responsiveness Summary explained that the language “was no longer needed” because the duration of the incidents covered...
Reviving the earlier language to now address a concern regarding the practical enforceability of the condition is not appropriate or desirable. 77 While it would be a convenient resolution of the concern posed by this comment, it could raise technically-based concerns. For example, it could call into question the merits of a one-size-fits-all approach for corrective actions for malfunction and breakdown events. For the array of emission units at issue at Dallman, applying a 24-hour timeframe as the initial deadline for all corrective action could reasonably be viewed as arbitrary. As discussed below, it could also be construed as inconsistent with the provisions of 35 IAC Part 201 Subpart I that apply to malfunctions and breakdowns. When this rule is carefully considered in its full context, it becomes clear that the “as soon as practicable” language from the permit is not so vague as to render it unenforceable in the absence of a specific time period.

The phrase “as soon as practicable” is appropriately used in contexts where the nature of actual events that would be addressed are uncertain and could vary substantially. For example, the timing of corrective action for a major failure of particulate matter control systems on a boiler could vary greatly depending on how quickly alternative generating resources can take over generation and the load on the affected boiler can be reduced. This could depend upon the demand on the grid when the failure occurs. It could take less than one hour or several hours. However, given current generating resources in Illinois, it would be extraordinary if corrective action could not be completed within 24 hours.

It should also be noted that 35 IAC Part 201 Subpart I is silent with respect to when minimization or corrective action must take place or when excess emissions must cease. The Board did not explicitly address the timing of corrective and remedial actions for malfunction or breakthrough events. The Board does know how to create such standards, as illustrated by the related reporting requirement for such events in 35 IAC 201.263, which requires “immediate reporting.” Rather, the Board’s approach contemplates that the timing of such actions is juxtaposed with the dangers and/or need for essential services arising from a given event. In this regard, corrective action must be viewed as something to be undertaken when a source is able to safely proceed without risk to personnel or severe danger to equipment, and without interfering with providing essential services.

This interplay of 35 IAC Part 201 Subpart I supports the language in the cited permit conditions. The phrase “as soon as practicable” should be understood in light of the separate meanings given to “as soon as” (i.e., in or after a short time) and “practicable” (i.e., capable of being done or accomplished). By requiring corrective action as soon as practicable after the occurrence of excess

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77 Based on other comments, the provisions of the permit addressing 35 IAC Part 201, Subpart I continue to be of significant interest and concern to certain individuals and/or organizations.
emissions resulting from malfunction or breakdown, the permit gives recognition to the Board’s requirement that the timing of corrective action or minimization of emissions depends upon the circumstances related to the underlying event. It also recognizes that a source’s actions may be subject to review or question following an event as at most a prima facie defense is provided for the violation that accompanied a malfunction or breakdown event. As such, the subject permit conditions accurately reflect and implement the requirements of 35 IAC Part 201 Subpart I, consistent with Illinois’ current SIP for malfunction and breakdown events.

VIII. Comments Regarding Conditions in Section 7.1 and 7.2 of the Permit

(Coal-Fired Boilers 31, 32 and 33)

1. Permit Conditions: 7.1.7(b)(i) and 7.2.7(b)(i)

Comment:
Condition 7.1.7(b)(i) and 7.2.7(b)(i) of the “Revised” CAAPP Permit for Dallman, issued October 17, 2013 (the “2013 Permit”) required CO and PM emissions testing to be performed at the maximum operating loads of the affected boilers. However, the current Draft Permit only requires that measurements be performed at 90 percent or better of the “seasonal” maximum operating loads.

There are two problems with this requirement. First, what is meant by the word “seasonal” in this condition is unclear, undermining the Title V program’s purpose of “enable[ing] the source, States, EPA, and the public to understand better the requirements to which the source is subject, and whether the source is meeting those requirements.” Operating Permit Program, 57 FR 32,250.

Second, CO and PM emissions should be measured under operating conditions that would lend themselves to the highest level of emissions. Otherwise, there might be a spike in emissions between those reflected in testing and those that occur when the affected boilers are operating at maximum operating loads, and the testing will thus fail to demonstrate compliance with applicable CO and PM requirements at those times. Accordingly, the Draft Permit should provide for CO and PM emissions testing at maximum allowable operating loads to ensure that authorities are aware of the maximum emissions levels that might occur and can add permit conditions to ensure emissions do not exceed allowable levels.

Response:
As discussed, the concerns expressed in this comment have been generally addressed in the issued permit by reliance on the approach to operating load of boilers in the relevant provisions of the MATS rule. This approach requires that testing of EGUs be conducted at
loads such that the results of the test can be considered representative of the operation and emissions of the boiler. It does not require that testing of EGUs be conducted at the design or rated loads of EGUs, which loads may not be achievable during testing and may rarely, if ever, be achieved in practice.

2. Permit Conditions: 7.1.7(a)(i) and 7.2.7(a)(ii)
Related Conditions: 7.1.4(b) and 7.2.4(c)

Comment:
Under Conditions 7.1.7(a)(i) and 7.2.7(a)(ii) of the Draft Permit, PM stack tests may be done within 15 months of the preceding PM stack test if, based on that stack test, the compliance margin for PM is less than 20 percent; within 27 months of the preceding PM stack test if, based on that stack test, the compliance margin for PM is between 20 and 40 percent; and within 39 months of the preceding PM stack test if, based on that stack test, the compliance margin for PM measurement was greater than 40 percent.

The length of time between those drawn-out stack tests renders them insufficient to demonstrate compliance with PM limits at Boilers 31/32 and 33. As set forth in Condition 7.1.4(b) and 7.2.4(c) of the Draft Permit and discussed in the Statement of Basis at Section 4.2, PM limits for the Dallman Boilers 31/32 and 33 are 1-hour limits over a three-hour averaging period: 0.10 lb/MMBtu in any single hour. Stack tests that take place up to 39 months apart simply cannot ensure that, during every hour the boilers are operational, they are complying with their respective limits. See Sierra Club v. EPA, 536 F.3d 673, 674-75 (D.C. Cir. 2008) (emphasis added) (noting that annual monitoring would not ensure compliance with a daily emission limit).

The inadequacy of the stack tests to assure compliance is not cured by the remainder of the CAM plan for PM in the Draft Permit because, as discussed in detail above, that CAM plan is itself inadequate to ensure compliance with PM limits. As such, because the Draft Permit does not contain sufficient monitoring and testing requirements to assure compliance with the PM emission limits, it falls short of Title V’s requirements. See Sierra Club, 536 F.3d at 674-75 (“a monitoring requirement insufficient ‘to assure compliance’ with emission limits has no place in a permit unless and until it is supplemented by more rigorous standards.”); see also NRDC v. EPA, 194 F.3d at 136; In the Matter of Midwest Generation, LCC, Waukegan Generating Station, 2005 EPA CAA Title V Lexis 14 at *44-45; 40 CFR 70.6(a)(3)(i)(B); 40 CFR 70.6(c)(1). The Draft Permit should be revised to require PM CEMS at Boilers 31/32 and 33, instead of infrequent PM stack tests paired with inadequate parametric monitoring, to demonstrate compliance with the one-hour PM emissions limits at the Station.

Response:
As observed by this comment, the PM testing that is required for Boilers 31 and 32 by Condition 7.1.7(a)(i) and Boiler 33 by Condition 7.2.7(a)(ii) is not relied upon to address ongoing, day-to-day compliance with the applicable state PM emission standards. Rather, the permit relies on the CAM plans as the means to address
ongoing compliance between testing. In this regard, as explained by USEPA when adopting 40 CFR Part 64,

[the CAM approach builds on the premise that if an emissions unit is proven to be capable of achieving compliance as documented by a compliance or performance test and is thereafter operated under the conditions anticipated and if the control equipment is properly operated and maintained, then there will be a reasonable assurance that the emission unit will remain in compliance. In most cases, this relationship can be shown to exist through results from the performance testing without additional site-specific correlation of operational indicators with actual emission values. The CAM approach builds on this fundamental premise of the regulatory structure. 62 FR 54900, 54926, Oct. 22, 1997]

The CAM plans addressed by the issued permit are not deficient. The specific comments that have been made on these CAM plans have been appropriately considered and addressed by the Illinois EPA. As such, this comment does not show that PM CEMS are necessary on these boilers to address compliance with the applicable state standards.

It should also be noted that, other than to observe that the required PM testing does not serve to address ongoing compliance, this comment does not actually comment on the “tiered approach” for such testing that is contained in the permit, other than to suggest that it is not a substitute for appropriate Periodic Monitoring. Tiered approaches to emission testing are used in a number of USEPA regulations. They act to reasonably reduce the burden associated with testing for sources that comply with an applicable emission standard by a significant margin of compliance. Tiered approaches also enable a regulatory authority to focus its resources on emission units whose compliance is less clear. A tiered approach to PM testing, as contained in Conditions 7.1.7(a)(i) and 7.2.7(a)(ii), is appropriate for these coal boilers at Dallman. 79, 80

3. Permit Conditions: 7.1.7(a)(iii), 7.1.10-2(a)(i)(B), 7.2.7(a)(i) and 7.2.10-2(a)(i)(B)
Related Conditions: 7.1.7(b)(i) and 7.2.7(b)(i)

Comment: Conditions 7.1.7(a)(iii) and 7.2.7(a)(i) of the Draft Permit change how PM emissions measurements are to be conducted at Dallman. Conditions 7.1.7(a)(ii) and 7.2.7(a)(ii) of the 2013 Permit required CWLP to collect PM emission measurements:

79 For Boilers 31/32 and 33, the most recent PM tests addressing the state emission standards for PM were performed on October 19th, 2016 and October 24th, 2014, respectively. Both tests showed compliance margins greater than 40 percent (97.1% for Boilers 31/32 and 68.4% for Boiler 33). In addition to these stack tests, MATS testing was recently performed on Boilers 31/32 and 33 on April 11, 2017 and February 28, 2017 respectively. This more recent testing continues to demonstrate that compliance margins are greater than 40%. Accordingly, the next tests must be conducted within 39 months of these tests.

80 Another approach to tiered testing is one that increases the interval between required tests after a number of tests have been conducted that all show emissions are below the applicable regulatory limit or a set value below that limit.
[W]ithin 90 days of operating an affected boiler for more than 72 hours total in a calendar quarter at a load that is more than 5 Megawatts or 2 percent higher (whichever is greatest) than the greatest load on the boiler, during the most recent set of PM tests on the affected boiler in which compliance is shown...

Conditions 7.1.7(a)(iii) and 7.2.7(a)(i) of the Draft Permit state:

PM emission measurements shall be made within 90 days of operating an affected boiler for more than 72 hours total in a calendar quarter at a load that is more than 15% higher than the greatest load on the boiler, during the most recent set of PM tests on the affected boiler in which compliance is shown...

First, it is problematic that the Draft Permit would change the threshold triggering PM emission measurements by eliminating any megawatt-increase trigger while simultaneously increasing the load-capacity trigger from 2 percent or higher than the greatest load on the boiler to 15 percent or higher than the greatest load on the boiler. This significant increase in load capacity that would trigger PM measurements creates the risk of the boilers operating with undetected PM exceedances. To wit, if the load at which the prior tests were conducted was not the maximum allowable load, Conditions 7.1.7(a)(iii) and 7.2.7(a)(i) of the Draft Permit could allow the Boiler to burn considerably more coal before needing to retest emissions, and would as such fail to assure compliance with emission limitations during the period within which the unit has had an up-to 14% increase in load. This Condition therefore fails to assure compliance with the PM limits, and should thus be removed from the Draft Permit and replaced with requirements that do, in fact, assure compliance with applicable PM requirements. See Sierra Club, 536 F.3d at 674-75. It would be far more appropriate and consistent with the Act to retain the requirement of the 2013 Permit providing that PM emissions testing is required if the boiler operates at a load that is more than five Megawatts or two percent higher (whichever is greatest) than the greatest load on the boiler during the most recent set of PM tests. The reporting requirements delineated in Conditions 7.1.10-2(a)(i)(B) and 7.2.10-2(a)(i)(B) of the Draft Permit also should be revised to be consistent with that mandate, requiring reporting of the total number of hours in which an affected boiler exceeded a load that was more than two percent higher than the greatest load on the boiler during the most recent set of PM tests.

Additionally, the 72 hours that the unit is allowed to run at increased load before triggering new PM testing requirements is far too long. If a boiler has an increased load for even three hours, due to the three-hour averaging period for PM, that three-hour increase alone could lead to a violation. A 72-hour trigger could allow up to 18 violations of PM emissions without detection. Thus, this 72 hour requirement should be removed and the Draft Permit should be revised to provide that re a much shorter amount of time of operation at increased load triggers PM emissions testing requirements.
Conditions 7.1.7(a)(iii) and (ii), and Conditions 7.2.7(a)(iii) and (ii), require that any PM emissions testing to be performed "within 90 days of operating an affected boiler for more than 72 hours total in a calendar quarter at a load (as defined in that rule) that is "more than 15 percent higher than the greatest load on the boiler, during the most recent set of PM tests on the affected boiler in which compliance is shown ...." Conditions 7.1.7(a)(ii) and 7.2.7(a)(iii) state that CO emissions shall be measured in conjunction with the initial measurements of PM emissions, as required by Conditions 7.1.7(a)(i) and 7.2.7(a)(i). Condition 7.1.7(b)(i) specifies that measurements of PM and CO emissions "shall be performed at 90% or greater of the seasonal maximum operating loads" of the boilers and "other operating conditions that are representative of normal operation." I have the following concerns with these conditions:

As written, Conditions 7.1.7(a)(iii) and 7.2.7(a)(i) authorize the Permittee to test at close to 100 percent of its "seasonal maximum" operating load, without having to retest in the future unless, among other things, the Permittee actually operates the boilers at 115 percent or higher of the maximum operating load for more than 72 hours in a calendar quarter. Conditions 7.1.7(a)(ii) and 7.2.7(a)(iii) provide a similar approach for CO. These provisions could allow the Permittee to violate PM and CO emission limits, if emissions from the last compliant source test were close to the limit. It could also allow the Permittee to indefinitely operate at levels that are higher than the representative testing conditions that are established in the initial testing, as discussed further below in the comment on Conditions 7.1.7(b)(i) and 7.2.7(b)(i).

Response:
In response to this and other comments, Draft Conditions 7.1.7(a)(iii) and 7.2.7(a)(i), and related reporting requirements in Draft Conditions 7.1.10-2(a)(i)(B) and 7.2.10-2(a)(i)(B), have not been carried over into the issued permit. Rather, Conditions 7.1.7(b)(i) and 7.2.7(b)(i) now specify that the periodic testing of the coal boilers, as is required to authoritatively confirm compliance with state PM emission standards, must be conducted at “maximum normal operating load conditions.” This requirement, which uses terminology in the MATS rule for PM emission testing at 40 CFR 63.10007(a)(2), will serve to ensure that the required emission testing is conducted at sufficiently high load that the results can be considered representative. 81

81 Comments on the USEPA’s proposed MATS Rule Technical Corrections pointed out that at any given time, the load of EGUs may be restricted due to equipment failure or operating at less than maximum output because of commercial arrangements or transmission system restrictions or constraints, or be load-restricted by the Regional Independent System Operator. In response to these comments, USEPA observed that the MATS rule does not require EGUs to operate at maximum normal operating load during testing, but instead allows stack tests to be conducted at the load at which the EGU is capable of operating at the time of the test. This is because 40 CFR 63.10007(a)(2) specifies that EGU load for purposes of testing to demonstrate compliance “should be representative of site specific normal operations during each test run.”
Revised Conditions 7.1.7(b)(i) and 7.2.7(b)(i) also serve to address the load of the coal boilers during testing for CO emissions. This is because, unless measurements of CO emissions have been made during the Relative Accuracy Test Audit of the SO2 or NOx continuous emission monitoring system (CEMS) preceding a test, testing for CO emissions is to be conducted in conjunction with PM testing Conditions 7.1.7(a)(ii)(A) and 7.2.7(a)(iii)(A) in the issued permit.82, 83

4. Permit Conditions: 7.1.7(b)(i) and 7.2.7(b)(i)

Comment: The permit record does not show that the Permittee has provided a demonstration that the approach to the operating conditions under which emission testing must be conducted will enable the boilers to remain in continuous compliance with applicable emission limits at all times, including when operating at maximum capacity. The Statement of Basis (SOB) similarly does not provide such an explanation.

The main reason for performance testing of an emission unit is to determine whether emissions from the source can demonstrate compliance on a continuous basis.84 Accordingly, performance tests conducted for the purpose of demonstrating compliance must be conducted under normal process operating conditions producing the highest emissions. This expectation is reflected in EPA's stack testing guidance, which recommends that a source be tested at an operating level that would represent the highest emissions during the expected normal operation of the source. See EPA CAA Stack Testing Guidance, April 27, 2009, available at: http://www3.epa.gov/ttnemc01/guidlnd/gd-050.pdf (pp. 14-16)

Where it is not possible to replicate such conditions during the test (such as due to safety concerns, or if testing is being conducted during a period of low productivity by the source), the source must provide the permitting authority with a demonstration that the source will be in continuous compliance with applicable emission limits at all times, including when operating at maximum capacity. As explained in the stack testing guidance, the Permittee is responsible for making this demonstration.

In the absence of an adequate explanation in the permit record or SOB, the permit should be revised to require that any re-testing be

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82 These conditions provide that that intervals between CO testing can be twice those for PM testing if the measurements show that emissions are half the applicable state CO standard, 35 IAC 216.121.

83 The operating rate or load of these coal boilers during emission testing for CO emissions does not present the same concerns that are present for testing of PM emissions. This is because add-on control devices are not used on the boilers for CO emissions whereas PM emissions are controlled with ESPs. As a general matter, the performance of ESPs is inversely affected by load, as higher flue gas flows and lower residence times act to lower control efficiency.

84 The Act defines the terms "emissions limitation" and "emission standard" in Section 302(k) as "a requirement established by the state of the Administrator which limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis ...." (emphasis added.)
performed at the maximum capacity at which the boilers are expected to be operated. Alternatively, Illinois EPA could add a permit condition that prohibits the boilers from operating at a load higher than the operating load during the most recent performance test that demonstrated compliance. Without such revisions, the permit does not assure compliance with all applicable requirements, in accordance with 40 CFR 70.6(a)(1).

Response:
As discussed, the change to the permit requested by this comment is not appropriate. Testing of the boilers at their maximum capacity is not needed to adequately demonstrate or assure compliance with applicable state emission standards nor would such testing be reasonable. This is shown by the approach to emissions testing taken by USEPA in the MATS rule.

5. Permit Conditions: 7.1.7(b)(i) and 7.2.7(b)(i)

Comment:
Conditions 7.1.7(b)(i) and 7.2.7(b)(i) of the permit authorize initial testing of the boilers at a capacity of 90 percent or greater of the seasonal maximum operating loads. As with Conditions 7.1.7(a)(iii) and (a)(ii), and Conditions 7.2.7(a)(i) and (a)(iii), these provisions could allow the Permittee to violate PM and CO emission limits if emissions from the last compliant source test were close to the limit. It could also allow the Permittee to indefinitely operate at levels that are higher than the representative testing conditions.

Again, the permit record does not show that the Permittee has provided a demonstration that this will enable the boilers to remain in continuous compliance with applicable emission limits at all times, including when operating at maximum capacity. The SOB similarly does not provide an explanation as to how this approach would yield PM and CO emissions that represent maximum emissions from the affected boilers.

The main reason for performance testing of an emission unit is to determine whether emissions from the source can demonstrate compliance on a continuous basis. Accordingly, performance tests conducted for the purpose of demonstrating compliance must be conducted under normal process operating conditions producing the highest emissions. This expectation is reflected in EPA's stack testing guidance, which recommends that a source be tested at an operating level that would represent the highest emissions during the expected normal operation of the source. See EPA CAA Stack Testing Guidance, April 27, 2009, available at: http://www3.epa.gov/ttnemc01/guidlnd/gd-OSO.pdf (pp. 14-16)

Where it is not possible to replicate such conditions during the test (such as due to safety concerns, or if testing is being conducted during a period of low productivity by the source), the source must provide the permitting authority with a demonstration that the source will be in continuous compliance with applicable emission limits at all times, including when operating at maximum
capacity. As explained in the stack testing guidance, the Permittee is responsible for making this demonstration.

In the absence of an adequate explanation in the permit record, the permit should be revised to require that testing be performed at the maximum capacity at which the boilers are expected to be operated. Alternatively, IEP A could add a permit condition that prohibits the boilers from operating at a load higher than the operating load during the most recent performance test that demonstrated compliance. Without such revisions, the permit does not assure compliance with all applicable requirements, in accordance with 40 CFR 70.6(a)(J).

Response:
The concerns expressed by this comment have also been addressed in the issued permit as Conditions 7.1.7(b)(i) and 7.2.7(b)(i) now use the terminology of the MATS rule to define the operating load at which the coal boilers must be operated during periodic emission testing. This condition no longer refers to the seasonal load of a boiler.

Conditions 7.1.7(b)(i) and 7.2.7(b)(i) in the issued permit are fully consistent with the principle expressed in the USEPA Stack Test Guidance that, to the fullest extent possible, emission testing should be conducted under conditions that are representative of those that pose the greatest challenge to the ability of a unit to meet applicable limits. This guidance does not state that emission testing must be conducted at the maximum load at which the tested emission unit would subsequently ever be operated, as implied by this comment.

It is also noteworthy that, as already discussed, testing of the coal boilers showed compliance with the applicable state PM standards with substantial margins of compliance. The results of future testing should likewise not be expected to be close to the applicable standards. Moreover, if this is the case or if a boiler

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85 The USEPA Stack Test Guidance is not directly applicable to the emission testing addressed by this comment. As explained in this guidance, for the purpose of this guidance, stack testing is being more narrowly defined as - Any performance testing conducted for the purposes of determining and demonstrating compliance with applicable standards of 40 CFR Parts 60, 61 and 63.

USEPA Stack Testing Guidance, p. 3

86 The USEPA Stack Testing Guidance does acknowledge that a permitting authority, presumably in appropriate circumstances, may restrict the operation of an emission unit based on the conditions under which emission testing was conducted. This guidance does not affect the ability of delegated agencies to prohibit a facility from operating at levels of capacity different from the level used during the stack test, or to restrict production to reflect conditions equivalent to those present during the stack test.

USEPA’s Stack Testing Guidance, p. 16.
is operated in such a way that further emission testing is warranted to confirm compliance with the state PM standard, the Illinois EPA is authorized to require the Permittee have such testing conducted.\textsuperscript{87}

6. Permit Conditions: 7.1.8(e) and 7.2.8(e)

Comment:
In 1990, Congress enacted amendments to the CAA intended to enhance emissions source monitoring and compliance and to impose new monitoring and reporting requirements on emissions sources. See Natural Resources Defense Council, Inc. v. USEPA, 194 F.3d 130, 132 (D.C. Cir. 1999); 42 USC 7414(a)(1)(D)-(E), (a)(3). In response to these 1990 amendments, USEPA in 1997 adopted the CAM rule, 40 CFR Part 64. The CAM rule provides that, in order to assure compliance with applicable emission limits, owners and operators must design monitoring criteria that “establish an appropriate range(s) or designated condition(s) for the selected indicator(s) such that operation within the ranges provides a reasonable assurance of ongoing compliance with emission limitations or standards for the anticipated range of operating conditions.” 40 CFR 64.3(a). “Such range(s) or condition(s) shall reflect the proper operation and maintenance of the control device (and associated capture system), in accordance with applicable design properties, for minimizing emissions over the anticipated range of operating conditions at least to the level required to achieve compliance with the applicable requirements.” Id. (emphasis added). The CAM program must “[a]llow for reporting of exceedances (or excursions if applicable to a COMS used to assure compliance with a particulate matter standard), consistent with any period for reporting of exceedances in an underlying requirement.” 40 CFR 64.3(d)(3)(i).

In the preamble to the CAM rule, USEPA explained that the rule:

\begin{quote}
[B]uilds on the premise that if an emissions unit is proven to be capable of achieving compliance as documented by a compliance or performance test and is thereafter operated under the conditions anticipated and if the control equipment is properly operated and maintained, then there will be a reasonable assurance that the emission unit will remain in compliance... Thus a critical issue that the CAM approach must address is establishing appropriate
\end{quote}

At the same time, the USEPA Stack Testing Guidance also indicates that the decision whether further testing should occur is one for which the permitting agency must make, presumably based on its experience and judgment,

...the facility is not required automatically to retest if the facility’s operating conditions subsequently vary from those in place during the performance test. The delegated agency must determine whether retesting is warranted; however, in both instances, the facility is responsible for demonstrating to the satisfaction of the delegated agency that the facility is able to continuously comply with the emissions limits when operating under expected operating conditions, taking into consideration the factors discussed above ...

USEPA Stack Testing Guidance, p. 16.

\textsuperscript{87} Specific provision for such testing “upon request” by the Illinois EPA is provided for by Condition 7.1.7(a)(iv).
objective indicators of whether a source is “properly operated and maintained.”

USEPA further explained:

[O]nce an owner or operator has shown that the installed control equipment can comply with an emission limit, there will be a reasonable assurance of ongoing compliance with the emission limit as long as the emissions unit is operated under the conditions anticipated and the control equipment is operated and maintained properly.”
Id. at 54,918 (emphasis added).

Therefore, the basic requirement of a CAM plan is that the permitted source establish monitoring for the purposes of:

(1) Documenting continued operation of the control measures within ranges of specified indicators of performance (such as emissions, control device parameters and process parameters) that are designed to provide a reasonable assurance of compliance with applicable requirements;

(2) Indicating any excursions from these ranges; and

(3) Responding to the data so that excursions are corrected.
Id. at 54,902.

As explained in detail below, the CAM plan for PM for Boilers 31/32 and 33 required by the Draft Permit does not contain sufficient indicators of performance to ensure compliance with PM emission limits, nor does it require sufficient responsive actions when performance indicators are operating outside of indicator ranges. The revised permit should address those deficiencies.

Conditions 7.1.8(e) and 7.2.8(e), Section 10.4, and Table 4.1 provide the CAM plan for PM for Boilers 31/32 and 33. The CAM plan in Table 4.1 involves only opacity with a 20% indicator range. Illinois EPA also should revise the CAM plan for Boilers 31/32 and 33 to include monitoring of parameters of ESP performance at Boilers 31/32 and 33 in addition to opacity. Specifically, pursuant to USEPA guidance, the CAM plan should include monitoring of voltage and current for each ESP field. This additional monitoring is particularly appropriate for these boilers because opacity and PM are measured at different points in the flue gas streams of the boiler, making the correlation between them less robust.

Response:
The relevant issue for the CAM plans for Boiler 31/32 and 33 is whether there is an adequate correlation between opacity and PM emissions so that the plans provide a reasonable assurance of compliance with the applicable state PM standards. As explained in more detail below, additional parameters do not need to be added to the CAM Plans because the current plans meet the requirements of 40 CFR Part 64. They will serve to reasonably address compliance with
the emission standards that apply to these boilers for particulate matter and ensure that that the ESPs are properly operated.

7. Permit Conditions: Section 10.4

Comment:
In the ESP CAM Protocol, USEPA described the limitations of using opacity as the sole indicator for PM emissions, in general, due to the lack of a linear relationship between the two:

[O]pacity, a commonly used parameter, can indicate ESP performance. If the opacity is increasing, you can reasonably assume that PM emissions are increasing. What generally is not known on a quantitative basis is the magnitude of the mass emissions relative to any one opacity value or the increase in mass emissions relative to the increase in opacity. In addition, and perhaps most importantly, the relationship between opacity and mass emissions can vary significantly with the particle size distribution and refractive index of the ash particles. The properties of the particulate matter can be influenced by fuel changes and the number and location of ESP electrical sections in service.
Ex. D, ESP CAM Protocol at 3.

USEPA’s “presumptively acceptable” approach, see 40 CFR 64.4(b)(5), provides that the source also should monitor not only opacity but also other ESP operating parameters—specifically, voltage and current for each ESP field—and run a calibrated computer model to calculate ESP efficiency when the opacity excursion level is triggered. Ex. D, ESP CAM Protocol at 4. See also USEPA, CAM Technical Guidance Document, App. A.25, Electrostatic Precipitator (ESP) For PM Control—Facility FF (June 2002), at A.25-2 (model CAM plan providing that “ESP secondary voltage and current are measured for each field to determine the total power to each ESP”).

Response:
The existence of the USEPA ESP CAM Protocol does not provide an adequate basis to conclude that the CAM plans submitted by the source for Boilers 31, 32 and 33 at Dallman are deficient and to require CAM plans that address operating parameter of the ESPs, as requested by this comment. Under 40 CFR Part 64, a CAM plan must be designed to provide a "reasonable assurance" of compliance with as applicable emission limit. The fact that the source could have developed CAM plans that followed the approach contemplated by the USEPA ESP CAM Protocol does not show that the CAM plans actually developed and addressed by the issued permit, do not provide a reasonable assurance of compliance.

88 Available at http://cfpub.epa.gov/oarweb/mkb/cam.cfm.
89 A CAM plan is not intended to provide enhanced monitoring such that there is a direct determination or measure of compliance with an applicable limitation. Indeed, if a source uses a “continuous compliance determination method” to determine whether an emission unit complies with a limitation, 40 CFR 64.2(b)(vi) provides that a CAM plan is not needed to address such limitation.
Moreover, as discussed in this comment, the USEPA ESP CAM Protocol involves opacity, the operating parameters of an ESP and the efficiency or performance of an ESP. Opacity is used as a “screening” parameter and is used to define periods of elevated opacity when a specific evaluation of the performance of the ESP is needed based on the operating parameters of the ESP during such periods. For the purpose of this evaluation, the USEPA ESP CAM Protocol relies on the development and calibration of a computer model for the performance of the ESP. This model would then be used to determine ESP performance from the operating parameters of the ESP. As such, the USEPA ESP CAM Protocol does not rely directly on the operating parameters of an ESP but on the performance of an ESP as calculated using a computer model. The source used a much simpler and more direct approach in its CAM plans for Boilers 31, 32 and 33 at Dallman, using opacity as the indicator parameter. For the source, this approach avoids having to develop and calibrate computer models for the ESPs on the two boilers. This is simpler for the Illinois EPA because there is not a delay while the model is being run to determine whether there was an excursion during a period of elevated opacity. It is also simpler because the Illinois EPA does not have to verify the design and calibration of the computer models or evaluate the modelling that is conducted by the source for periods of elevated opacity.

The comment also claims that in the USEPA ESP CAM Protocol, USEPA indicates that opacity alone is not a good indicator of proper operation of an ESP. This is patently untrue as the protocol uses opacity as a screening indicator. While as a general matter, opacity may not indicate the magnitude of mass emissions relative to any one opacity value, this does not mean that opacity cannot be used as the operating parameter in the CAM plan for a particular emission unit. In this regard, this protocol states that “…for any given ESP and boiler, opacity can serve as a very useful indicator to initiate additional action…” (USEPA ESP CAM Protocol, p. 3, emphasis added).

As a final point, it is noteworthy that the USEPA ESP CAM Protocol, which was only proposed by USEPA and never finalized, states that:

Use of this protocol is not required; you as source owners and operators may propose other PM monitoring approaches for ESP’s controlling coal-fired boilers. Presumptively acceptable monitoring is not prescriptive.

USEPA ESP CAM Protocol, p. 2 (emphasis added)

8. Permit Conditions: 7.1.8(e)(ii)(A), 7.2.8(e)(ii)(A) and 7.3.8(c)(ii)(A)

a. Comment:
In the case of the boilers at the Dallman Station, the correlation of opacity measurements to PM emissions measurements is less robust than it is under typical coal-fired power plant operating conditions

The example CAM plan in the USEPA ESP CAM Protocol provides that “When the hourly opacity is outside the indicator range, there is no reporting or corrective action requirement relative to the PM limit, but the operator must run the EPRI ESPM computer model.” USEPA ESP CAM Protocol, p. 13.
because of the intervening effect of the Fluid Gas Desulfurization ("FGD") in the stream. While opacity is measured immediately at the output of the ESPs, PM is measured through stack tests that occur after the flue gas stream also has passed through the FGD. Thus, while the ESPs are the primary pollution control device, the FGD also will impact PM emissions in ways that cannot necessarily be captured in the opacity data, potentially skewing the measurement of those emissions too low.

In particular, malfunctions can significantly skew the correlation between PM and opacity measurements such that there could be an increase in PM emissions, without a related increase in measured opacity, such that opacity monitoring could fail to indicate a potential PM violation. To address this potential problem, Illinois EPA should follow USEPA guidance and require monitoring of the ESP fields’ voltage and current in addition to opacity, in order to assure that the ESPs are properly operated and maintained.

Response:
The testing of PM emissions that was conducted for the coal boilers pursuant to other permit and regulatory requirements show that there is a correlation between opacity and PM emissions even with the operation of the FGD systems. This is especially true with the selected indicator value of 20 percent for opacity.¹¹, ¹²

Upsets in the operation of a FGD, as speculated upon by this comment, might result in higher PM emissions from a boiler. However, if the ESP is operating properly to control PM emissions as is addressed by the CAM plans, it is not realistic to expect that such upsets could cause a PM exceedance. This is because of the compliance margin that is now present for the PM standards, as shown by the results of the PM testing that was conducted.³³

b. Comment:
Condition 7.1.8(e)(ii)(A), 7.2.8(e)(ii)(A) and 7.3.8(c)(ii)(A) of the CAM plans set out the actions that CWLP is to take in response

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¹¹ The testing of the coal boilers for PM emissions shows that operation of the ESPs is the governing factor in their PM emissions and monitored opacity correlates well with the PM emissions of the boilers. The test results suggest that there is little, if any, reduction of PM attributable to WFGDs and they do not need to be treated as a PM control device for purposes of CAM.

¹² In addition, if as an academic matter, one desired to develop a “more robust” correlation between the operation of the control devices on these boilers and their PM emissions, it would be reasonable to focus on further operational monitoring for their role in further controlling or contributing to PM emissions. It would not be reasonable to focus on operational monitoring for additional operating parameters of the ESPs, as recommended by this comment. This is because the performance of the ESPs is directly addressed by the required opacity monitoring.

³³ Moreover, as this comment speculates on upsets in the operation of the WFGDs that might affect PM emissions, it points to matters that would not be addressed by operational monitoring for gas flow rate or pressure drop. As such, it points to aspects of the operation of the WFGDs that would not be addressed by the operational monitoring that is recommended by USEPA’s guidance for scrubbers that are used for control of PM emissions. At the same time, as these upsets of the WFGDs would involve aspects of operation that affect SO₂ emissions, these upsets would be identified by the monitoring of SO₂ emissions that is conducted for the boilers.
to excursions of indicator ranges. Essentially, the conditions require CWLP to “restore operation of the [Boilers] (including the control device and associated capture system) to [their] normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.” Draft Permit at Conditions 7.1.8(e)(ii)(A), 7.2.8(e)(ii)(A) and 7.3.8(c)(ii)(A). This standard does not provide enough detail to assure prompt correction of improper operation, and should be revised to include site-specific description of required responsive actions.

USEPA has emphasized the importance of responsive actions within a CAM plan:

[T]he Agency believes it is critical to underscore the need to maintain operation within the established indicator ranges. Therefore, the rule includes the requirement to take prompt and effective corrective action when the monitored indicators of compliance show that there may be a problem. Requiring that owners and operators are attentive and respond to the data gathered by part 64 monitoring has always been central to the CAM approach.

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[I]t is essential to the CAM goal of ongoing compliance operation that part 64 require that owners or operators respond to the data so that any problems indicated by the monitoring are corrected as soon as possible.

62 FR 54,931.

The CAM plans for the Dallman Station should include more detailed and enforceable requirements for responsive action. For opacity levels that threaten non-compliance with the PM emission limit, shutdown of the affected Boiler should be required. Additionally, the Permit should include a site-specific description of necessary responsive actions. Such requirements would be more enforceable than the currently vague reference to returning Boilers to their normal manner of operation “as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.”

Response:

This comment does not justify any changes to draft Conditions 7.1.8(e)(ii)(A), 7.2.8(e)(ii)(A) or 7.3.8(e)(c)(ii)(A). These conditions simply reiterate the relevant language in 40 CFR 64.7(d)(1), which addresses how a source must respond to excursions or exceedances identified pursuant to its CAM monitoring. As such,

94 40 CFR 64.7(d) provides:

94 40 CFR 64.7(d) provides:

(d) Response to excursions or exceedances. (1) Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely

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it is fully appropriate that this condition be included in the issued permit in the form in which it was set out in the draft permit without any changes. Moreover, when an exceedance or excursion is identified, the CAM Plan approved by the permitting authority should not predetermine the source’s response based on the magnitude of the occurrence. As confirmed by 40 CFR 64.7(d)(2), the adequacy of a source’s response to an exceedance or excursion is to be evaluated by a regulatory authority on a case-by-case basis.

Incidentally, it should be noted that the CAM Plan for Boiler 4 would only use opacity as a secondary indicator, for periods when the reliable data was not available from the continuous monitoring system for particulate matter.

9. Permit Conditions: 7.1.8(e) and 7.2.8(e) and Section 10.4 Tables 4.1 and 4.2

Comment:
The proposed Compliance Assurance Monitoring (CAM) plan should identify and include parametric monitoring ranges for important Electro-Static Precipitator (ESP) parameters to provide a reasonable assurance of ongoing compliance with the applicable PM emission limitations.

The boilers, which are identified as boilers 31, 32, and 33, are subject to, among other things, the monitoring requirements of the CAM plan described in Table 4.1, Condition 10.4 in Attachment 4 of the draft permit. See Conditions 7.1.8(e) and 7.2.8(e). The Permittee is required to control PM emissions from the boilers through use of an ESP. Additionally, as part of the recordkeeping requirements for the ESP, Conditions 7.1.9(b)(iii) and 7.1.12(b), 7.2.9(b)(iii) and 7.2.12(b) require the Permittee to record: the status of each ESP field at least once per shift; and primary voltages and currents, secondary voltages and currents, and sparking rates at least once per day.

Among other requirements, the CAM regulations require that subject sources establish appropriate indicator ranges for "one or more indicators of emission control performance for the control device,"

recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

(2) Determination of whether the owner or operator has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

95 In practice, the Illinois EPA would expect that if the cause of an excursion is not readily apparent, an important aspect of such an investigation would be an examination of the operating parameters of the ESP, for which the permit requires monitoring be conducted, comparing the values of those parameters during the incident, the values of parameters leading up to the incident, and the typical values of parameters.
and any associated capture system. See 40 CFR 64.3. The selected indicators and indicator ranges must provide a reasonable assurance of ongoing compliance with emission limitations or standards for the anticipated range of operating conditions. The draft permit's CAM plan relies on a continuous opacity monitoring system (COMS) as a surrogate for monitoring PM emissions from the boilers.

While opacity from a boiler stack is one good indicator of boiler operation and combustion efficiency, proper operation and maintenance of the ESP, which is the primary control device, is essential to assuring compliance with the applicable PM limits. Additionally, as discussed above, the purpose of the CAM regulations is to design monitoring criteria to obtain data of emission control performance for the control device to provide a reasonable assurance of compliance. See 40 CFR 64.3(a)(1). Therefore, in addition to COMS, ESP parameters should be used as an indicator of compliance. As noted above, the Permittee is required to keep records of certain ESP parameters. However, the CAM plan does not establish any ESP parameters as indicators of compliance, and it does not establish ranges for those parameters that indicate proper operation of the ESP.

As USEPA has previously explained, if ESP parametric monitoring is to be used as a surrogate to assure compliance with PM emission limits, the permit must contain specific operational limits (upper level or lower level) and/or operational ranges, or a method for determining the ranges. See In the Matter Of Midwest Generation, LCC Waukegan Generating Station, Petition Number V-2004-5 (Order on Petition), September 22, 2005, at 20-21. See also, "Proposed Compliance Assurance Monitoring (CAM) Protocol for an Electrostatic Precipitator (ESP) Controlling Particulate Matter (PM) Emissions from a Coal-Fired Boiler," available at https://www3.epa.gov/ttnemc01/cam/espcam.pdf.

To address the above issues, the CAM Plan must identify the key ESP operating parameters as indicators of performance, and establish appropriate ranges for those parameters, such that operation within the ranges provides a reasonable assurance of ongoing compliance with the PM emission limits, consistent with 40 CFR 64.3. The key operating parameters may be those already included in Conditions 7.1.9(b)(iii) and 7.2.9(b)(iii), and the parametric levels or ranges may be those established through emission tests or those listed by the control equipment manufacturer as the settings for optimum operation.

Response:
The principal purpose of the recordkeeping that is required by Conditions 7.1.9(b)(iii) and 7.2.9(b)(iii) for the operating parameters of the ESPs is to have certain relevant information

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96 Although the CAM Protocol does not mandate that certain indicators be used, it does provide that COMS and ESP parametric monitoring are sufficient to meet CAM requirements for PM. Any modifications to the Protocol must include a rationale for the modification.

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available if an excursion is identified by the CAM Plan.97, 98 As observed by this comment, the required records for the operating parameters of the ESPs would not serve to address compliance with the PM limits. Under the permit, compliance with PM limits is addressed by means of CAM plans that use opacity as the indicator parameter and not operating parameters of the ESPs. As such, the operation and maintenance of the ESPs is appropriately addressed in the permit without the need to correlate the operating parameters of the ESPs to PM emissions and include ranges for those operating parameters in the permit.99 As already discussed, USEPA has determined that Periodic Monitoring that meets the requirements of 40 CFR 70.6(a)(3)(i)(B) is sufficient to satisfy the requirements of 40 CFR 70.6(c)(1) (i.e., will be sufficient to assure compliance with subject permit terms and conditions).100

10. Permit Conditions: 7.1.10-2(d)(iii)(D) and (E) and 7.2.10-2(d)(iii)(D) and (E)

Comment:
Conditions 7.1.10-2(d)(iii) and 7.2.10-2(d)(iii) of the Draft Permit no longer require CWLP to provide in its reports detailed explanations of the cause of excess opacity and corrective actions taken in response to the excess opacity. Draft Permit Conditions 7.1.10-2(d)(iii)(D) and (E) and Conditions 7.2.10-2(d)(iii)(D) and (E). Rather than provide detailed explanations, CWLP must only report the actual cause of excess opacity and the corrective actions it took. Under the 2013 Permit, in contrast, the permittee was required to include detailed explanations surrounding these events. 2013 Permit Conditions 7.1.10-2(d)(iii)(D) and (E) and Conditions 7.2.10-2(d)(iii)(D) and (E). The new Condition 7.3.10-2(iii)(d) of the Draft Permit also does not require a detailed explanation of these events. Rather than simply reporting the cause of excess emissions and the actions taken, it is crucial for permittees to provide detailed and accurate reports of these instances because such records would provide Illinois EPA with a better understanding

97 The records that are required would enable the Illinois EPA or USEPA to determine whether particular operating parameter(s) of the ESP during an excursion were meaningfully different from those for normal operation of the ESP.

98 As a more general manner, when as a matter of good practice, a source would keep records related to the operation of an air pollution control device, it is appropriate that a CAAPP permit require the source to keep such records. Such information may serve to confirm the consistent operation of the control device by the source and timely action by the source in response to changes in the operating parameters of the control device.

99 As is evident from USEPA’s Compliance Assurance Monitoring (CAM) Protocol For An Electrostatic Precipitator (ESP) Controlling Particulate Matter (PM) Emissions from a Coal-Fired Boiler, Proposed (USEPA ESP CAM Protocol), establishing a correlation between the operating parameters of an ESP and the PM emissions of a coal-fired boiler is not a simple matter. In this guidance, USEPA suggested that monitored opacity of a coal-boiler should be used as a “screening technique” in the CAM plan. If the monitored level of opacity exceeds the screening value, an assessment of compliance for PM emissions should then be conducted using the operating parameters of the ESP during the event and a computer model. This guidance did not suggest that CAM plans should establish indicator ranges for the operating parameters of ESPs on coal boilers.

100 It should be noted that as this comment refer to ESPs, it is not appropriate for Boiler 4. The particulate matter emissions of Boiler 4 are controlled by a baghouse followed by a wet electrostatic precipitator.
of circumstances surrounding such events. This would allow Illinois EPA to engage in better oversight of the plant and could give Illinois EPA the opportunity to help CWLP prevent future exceedances. Thus, Conditions Condition 7.1.10-2(d)(iii)(D) and (E) and 7.2.10-2(d)(iii)(D) and (E) should continue to require detailed explanations from the permittee and Conditions 7.3.10-2(iii)(d)(D) and (E) should contain these same modifications.

Response:
This comment does not show that it is inappropriate for conditions of the CAAPP permit to only require general reporting of the cause of an exceedance and to recognize that certain exceedances may occur for which the source may not be able to identify a cause or causes. As the source must still report the occurrence of the exceedance itself, information is still reported that would enable the Illinois EPA or USEPA to reasonably evaluate such exceedance. 101

11. Permit Conditions: 7.1.12(a)(ii)(A) and 7.2.12(a)(ii)(A)

Comment:
Conditions 7.1.12(a)(ii)(A) and 7.2.12(a)(ii)(A) establish record requirements when CWLP chooses to rely on 35 IAC 212.123(b) to allow opacity greater than 30 percent of an affected boiler. This provision concerning 1-minute averaging has been weakened in the Draft Permit. Whereas the 2013 Permit allowed CWLP to maintain a record of “1-minute average opacity data determined from six or more data points equally spaced during each minute period to determine whether opacity from the boilers exceeded 30 percent opacity,” the Draft Permit only requires CWLP to use four data points rather than six. Significant Modification Permit Condition 7.1.12(a)(ii)(A) and 7.2.12(a)(ii)(A), Draft Permit Condition 7.1.12(a)(ii)(A) and 7.2.12(a)(ii)(A). CWLP should continue to collect this information from at least six data points so that the information collected presents a more accurate representation of opacity from the boilers during that period. Thus, Conditions 7.1.12(a)(ii)(A) and 7.2.12(a)(ii)(A) should not be revised to allow CWLP to maintain a record of 1-minute average opacity data determined from only four data points.

Response:
The change in the number of data points required from “six or more” to “four or more” in these conditions was made because CWLP may be using Reference Method 9 to determine to opacity. Reference Method 9 only requires visual opacity readings every 15 seconds so only four measurements would be completed in a one minute period. Conditions 7.1.12(a)(ii)(A) and 7.2.12(a)(ii)(A) also allows CWLP to use continuous data recordings to determine short-term opacity which would be the more likely method in these situations.

101 Key factors in such an evaluation would likely be the magnitude, duration and frequency of the exceedances. It is reasonable to expect the cause or causes of exceedances that are large, continue for a period of time or are repeated could be identified. This is because more information would be available to consider the possible cause or causes of the incident.
Incidentally, this comment incorrectly suggests that 35 IAC 212.123(b) is applicable for Boiler 33. For Boiler 33, 35 IAC 212.122(b) provides an alternative to the generally applicable opacity standard at 35 IAC 212.122(a).

12. Permit Conditions: 7.1.12(b) and 7.2.12(b)

Comment:
Conditions 7.1.12(b) and 7.2.12(b) establish that compliance with the PM limits in Conditions 7.1.4(b), 7.2.4(a)(ii) and 7.2.4(c) are determined through "continuous opacity monitoring in accordance with Condition 7.1.8(a), PM testing in accordance with Conditions 7.1.7 and 7.2.7, and the recordkeeping required by Conditions 7.1.9 and 7.2.9." Conditions 7.1.9 and 7.2.9 contain all recordkeeping requirements for the boilers, associated controls, and associated monitoring equipment for all pollutants. Conditions 7.1.12(b) and 7.2.12(b) should be revised to include only the portions of Conditions 7.1.9 and 7.2.9 that are directly related to compliance with the PM limits.

Response:
The specific records that would be relevant to determining compliance with the PM limit for Boilers 31, 32 and 33 are the records required by Conditions 7.1.9(b)(i) and (b)(iii), 7.1.9(a)(i) through (a)(iv), (c) and (f) through (h), 7.2.9(b)(i) and (b)(iii), 7.2.9(a)(ii) through (v), (c) and (f) through (h). In response to this comment, this is now indicated in the issued permit. The word “relevant” is included to make clear that a combination of the information in these records could be relevant for the determination of compliance.

IX. Comments Regarding Conditions in Section 7.3 of the Permit

(Coal-Fired Boiler 4)

1. Permit Condition: 7.3.3-1(b)
Related Conditions: 7.3.6(b) and 7.3.1

Comment:
The Draft Permit’s emission limits for total PM, filterable PM, CO and sulfuric acid mist during periods of startup, shutdown and malfunction (SSM) at Unit 4 appear to be too lenient. The Clean Air Act and USEPA jurisprudence are clear that Best Available Control Technology (BACT) emission limits apply at all times and may not be waived during SSM. In re Tallmadge Generating Station, PSD Appeal No. 02-12, slip op., at 24 (EAB May 21, 2003). The Draft Permit contains two sets of BACT limits for the boiler for emissions of total PM, filterable PM, CO and sulfuric acid mist. One set of limits are heat-input based limits; the other set are pounds-per-hour limits. As listed in Draft Condition 7.3.3-1(b)(i), the applicable heat input-based limits, in pounds/mmBtu, are 0.018 for total PM; 0.012 for filterable PM; 0.120 for CO; and 0.0050 for sulfuric acid mist. The Draft Permit makes clear that none of these heat input-based limits apply during SSM. The second set of limits,
the pounds-per-hour limits, apply during SSM.\textsuperscript{102} Consequently, the short-term limits in Condition 7.3.6(b) are apparently intended to be secondary BACT limits. These short-term limits are 29.3; 85.3, 293 and 12.2 pounds/hour for filterable PM, total PM, CO and sulfuric acid mist, respectively. Draft Permit at Condition 7.3.6(b).

Where it is feasible for the unit to comply, secondary BACT limits should be derived directly from primary, heat input-based BACT limits.\textsuperscript{103} However, in the secondary BACT limits in the Draft Permit were not derived directly from the primary heat input-based BACT limits. In this regard, per Draft Condition 7.3.1, the rated heat input capacity of Boiler 4 is 2100 mmBtu/hour. For filterable PM, the product of the Draft Permit’s limit of 0.012 lbs/mmBtu and 2100 mmBtu/hr would be 25.2 lbs/hour, which is less than the permit’s secondary limit of 29.3 lbs/hour. For total PM, the corresponding limit based on a heat input of 2100 mmBtu/hour would be 37.8 lbs/hour, less than half of the permit’s limit of 85.3 lbs/hour. For CO, the corresponding limit would be 252 lbs/hour, while the secondary limit is 293 lbs/hour. Finally, for sulfuric acid mist, the corresponding limit would be 10.5 lbs/hour, compared to the secondary limit of 12.2 lbs/hour. Even without relaxing a pound per hour limit, hourly limits derived directly from heat input are more lenient than the primary, heat input-based BACT limits because, as a unit’s actual heat input is lower during SSM events, the pound per hour limits actually allow a unit to emit more per mmBtu. Unless it would be infeasible for Dallman to comply with secondary BACT limits that are derived directly from the primary, heat input-based BACT limits, the Draft Permit should be revised to provide for secondary BACT limits during SSM that derive directly from the primary, heat input-based BACT limits at the Station. See, e.g., In re Prairie State, 13 E.A.D. 1, 88 (EAB 2006).

Finally, once a unit is operating, the Permittee should make a determination as to whether the secondary BACT limits can be ratcheted down. The EAB in Prairie State listed permits containing “...a BACT limit that is to be made more stringent based on post-construction operating experience.” In re Prairie State, 13 E.A.D. 1, 89 (EAB 2006) (citing In re AES Puerto Rico, L.P., 8 E.A.D. 324, 348-50 (EAB 1999); In re Hadson Power 14, 4 E.A.D. 258 (EAB 1992)).

\textsuperscript{102} Draft Condition 7.3.3-1(b)(ii) would provide that:

For PM, PM total, CO and sulfuric acid mist, for which the limits in Condition 7.3.3-1(b) do not apply during startup, shutdown and malfunction, the applicable short-term numerical limits set by Condition 7.3.6(b), which address emissions in pounds/hour and which apply at all times, also serve as "secondary" numerical limits for purposes of BACT to address periods of startup, shutdown and malfunction, with compliance determined based on engineering analysis and calculations.

\textsuperscript{103} See, for example, In re Prairie State, 13 E.A.D. 1, 88 (EAB 2006):

[T]he secondary BACT limits were derived directly from the primary heat input BACT limits and do not authorize emissions greater than the primary limits would allow at the units’ rated heat input capacity.
Now that the unit is operating, has CWLP affirmatively demonstrated that it cannot comply with more stringent limits during SSM.

Response:
This comment does not justify any changes to the limits established for Unit 4 as BACT for emissions of PM, total PM, CO or sulfuric acid mist, as accurately reflected in the conditions of the draft CAAPP permit that are the subject of this comment. These limits were established in 2006 during the issuance of the PSD approval for Unit 4 under the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21. Those limits were not challenged when that permit was issued. It is not appropriate in the context of this CAAPP/Title V permit proceeding over ten years later to now revisit the determination of BACT, as requested or suggested by this comment. While the comment points to certain decisions by the USEPA’s Environmental Appeals Board (EAB) as support for reconsideration of the BACT limits for Unit 4 as part of this proceeding, those decisions involved appeals of the provisions of PSD approvals at the time that those approvals were issued. These decisions did not involve reconsideration of BACT ten years after the approvals were originally issued. Moreover, BACT is determined on a case-by-case basis. The technical matters that were the subject of those appeals are not necessarily relevant to the BACT determinations made in 2006 for Unit 4.

2. Permit Conditions: 7.3.3-1(c)(ii)

Comment:
Condition 7.3.3-1(c)(ii) contains an incorrect reference, "(See also Condition 2.1.6(a).)." The reference incorrectly cites to a condition of the Construction/PSD permit for Unit 4 rather than to the actual condition in the draft of CAAPP Permit. This reference should be corrected to "(See also Condition 7.3.5(a))."

Response:
The cross-reference in Condition 7.3.3-1(c)(ii) was corrected as suggested by this comment.

3. Permit Conditions: 7.3.5(a)

For example, in the cases involving Prairie State and AES Puerto Rico, one issue was whether a PSD approval may provide for review and possible lowering of a BACT limit based on the actual operation of a proposed emission unit. The EAB confirmed that was permissible.

In this regard, for the BACT limit for total PM for Boiler 4, these type of provisions were included in the PSD approval for the Dallman 4 project. Pursuant to Conditions 2.1.2(b)(i)(B) and 2.1.15 of Permit 04110050, Boiler 4 is now subject to a BACT limit for total PM of 0.018 lbs/mmBtu, i.e., the BACT limit indicated by this comment. This limit is more stringent than the BACT limit initially set by the PSD approval, 0.035 lbs/mmBtu. However, the secondary BACT limit for total PM, in lbs/hour, as well as the secondary BACT limits for other pollutants, were not reexamined or lowered. This is because this was not provided for by the PSD approval. Incidentally, 0.018 lbs/mmBtu is a BACT limit for total PM, in lbs/mmBtu, that was specified by Permit 04110050. This permit, Condition 2.1.15, provided that this limit would take effect if CWLP did not conduct an evaluation to support a higher limit for total PM based on the actual operation of Boiler 4. CWLP chose not to conduct such an evaluation so that the BACT limit was automatically lowered to 0.018 lbs/mmBtu.
a. Comment:
Draft Condition 7.3.5(a)(ii) would apply to SSM plan and provide:

This plan shall include detailed provisions for review of relevant operating parameters of the affected boiler systems during startup, shutdown and malfunction as necessary to make adjustments and corrections to reduce or eliminate any excess emissions.

This condition would include language that is vague, subjective, and not enforceable as a practical matter. See In re Cash Creek Generation, LLC, Permit No. V-09-006, 2012 EPA CAA Title V Lexis 5, *94-*96 (USEPA June 22, 2012); USEPA Region 9 Title V Permit Review Guidelines (Sept. 9, 1999), at III-46. The term “relevant” is both vague and subjective, effectively leaving it up to the permittee to determine which operating parameters are relevant. Similarly, the term “as necessary” is also vague and subjective, effectively leaving to the permittee the decision of when review of operating parameters during SSM is necessary. Finally, the Permittee is allowed to determine when excess emissions should be reduced versus eliminated. The Clean Air Act does not allow for mere “reduction” of excess emissions; rather, excess emissions must be eliminated and emission limits met.

Response:
As related to any malfunction of Boiler 4 that result in emissions that exceed the referenced emission limits, the CAAPP permit does not provide that CWLP may simply take actions to reduce emissions rather than actions to eliminate excess emissions. CWLP’s obligation in the event of malfunctions is specifically set forth in Condition 7.3.5(a)(iv)(A) as it addresses the required contents of the SSM Plan as related to malfunctions, as follows. This condition makes clear that CWLP is not given the discretion to merely reduce excess emissions in the event of a malfunction rather than take action to eliminate excess emissions.105

With respect to malfunction, identify and address likely malfunction events with specific programs of corrective actions, and provide that upon occurrence of a malfunction that will result in emissions in excess of the applicable limits in Conditions 7.3.3-1(b), 7.3.3-2(a)(i) or 7.7.3-3(a) through (c), the Permittee shall, as soon as practicable, repair the affected equipment, reduce the operating rate of the boiler, remove the boiler from service or take other action so that excess emissions cease.

In the context of the this condition, the use of the phrase “relevant parameters” is appropriate. This is because those parameters are described by the context in which this phrase is

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105 As Condition 7.3.5(a)(ii) provides for CWLP to take actions to reduce excess emissions, this obligation applies to startup and shutdown of Boiler 5. In this regard, Condition 7.3.5(a)(ii), as addressed by this comment, generally addresses the SSM plan. As such, this condition addresses both startup and shutdown of the boiler and malfunctions of the boiler.
used. The operating parameters that must be addressed by the plan are the operating parameters that would need be to adjusted or corrected to reduce or eliminate any excess emissions from startups and shutdowns and to eliminate excess emissions from malfunctions. Some of those operating parameters may be readily apparent, for example, the operating load of the boiler and the key operating parameters of controls systems. However, other operating parameters may not be so apparent. Accordingly, in the context of this condition, it is preferable to use the phrase “relevant parameters” rather than listing specific parameters.

b. Comment:

Draft Condition 7.3.5(a)(iv)(B) would also be vague, ambiguous and difficult to understand and therefore not enforceable. See In re Cash Creek Generation, LLC, Permit No. V-09-006, 2012 EPA CAA Title V Lexis 5, *94-*96 (USEPA June 22, 2012); USEPA Region 9 Title V Permit Review Guidelines (Sept. 9, 1999), at III-46. Condition 7.3.5(a)(iv)(B) provides:

... if the Permittee has maintained and operated the affected boiler and associated air pollution control equipment so that malfunctions are infrequent, sudden, not caused by poor maintenance or careless operation, and in general are not reasonably preventable, the Permittee shall begin shutdown of the boiler within 90 minutes.

It is difficult to comprehend why the requirement to shut down the boiler within 90 minutes of a malfunction applies only if the malfunction is infrequent, sudden, and not reasonably preventable. It leaves the question of how long the permittee has to shut down the boiler in the event of a malfunction that is frequent, not sudden, and/or reasonably preventable. In that event, does CWLP get more than 90 minutes because the suggestion is that this condition does not apply?

Response:

The obligation on CWLP established by Condition 7.3.5(a)(iv)(B) is clear and unambiguous. If CWLP properly operates and maintains Boiler 4 so that the only malfunctions that occur would be considered malfunctions under the NESHAP, CWLP is explicitly provided with 90 minutes in which to carry out measures to eliminate a malfunction and restore compliance before shutdown of the boiler must be initiated. However, if Boiler 4 is having malfunction or upsets that would not be considered malfunctions for purposes of the

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106 Incidentally, both Conditions 7.3.5(a)(iv)(B) and (a)(ii) are provisions that were carried over from the Construction Permit/PSD Approval for Unit 4 issued in 2006. (Refer to Construction Permit Conditions 2.1.6(a)(iv)(A) and (a)(ii).)

107 This condition uses language from the definition of “malfunction” in the NESHAP, 40 CFR 63.2:

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions. (emphasis added)
NESHAP, CWLP is not explicitly provided with 90 minutes in which to take actions to correct or eliminate a malfunction. As such, based on the nature and circumstances of a particular malfunction event, as appropriately considered on an event-specific basis, it might be concluded that CWLP should initiate shutdown of the boiler sooner.

4. Permit Condition: 7.3.6(a)
Related Condition: 7.3.8

Comment:
In Draft Condition 7.3.6(a), the cross-reference to Condition 2.3.8 is not correct. Condition 2.3.8 is the condition in the construction permit for Unit 4 that sets out monitoring requirements for Boiler 4. Condition 7.3.6(a) should refer to Condition 7.3.8, the condition in the CAAPP permit that sets out monitoring requirements for Boiler 4.

Response:
The incorrect cross-reference in Draft Condition 7.3.6(a) identified by this comment has been corrected in the issued permit.

5. Permit Conditions: 7.3.8(c) and Section 10.4 – Tables 4.2A & 4.2B
Related Conditions: 7.3.8(b)(iv)

Comment:
Conditions 7.3.8 (c), Section 10.4, and Tables 4.2A and 4.2B provide the CAM plan for PM for Unit 4. For Unit 4, the CAM plan for filterable PM (both for the three-hour average and for the one-hour average) relies on filterable PM and opacity as the indicators. Permit, Section 10.4, Table 4.2A, Table 4.2B. The monitoring method used for filterable PM is the PM CEMS. Condition 7.3.8(b) requires PM CEMS as an operational measure. Since the unit is required to install PM CEMS, PM CEMS should be the monitoring method for filterable PM, not CAM. For decades, operators were claiming PM CEMS were not reliable, but by 2006, the technical hurdles with PM CEMS were being resolved. “Revised regulations and the availability and reliability of PM CEMS are making them a very valid choice for compliance demonstrations for PM emission limitations and for CAM requirements.” Burns & McDonnell, PM CEMS: The Current Reality of Monitoring Particulate Matter (Nov. 28, 2006). As of ten years ago, consequently, Burns & McDonnell, one of the leading engineering and design firms for the coal-fired electric generating industry, was stating the PM CEMS are a reliable, available, and valid choice for compliance with PM limits. As a result, PM CEMS should be considered as the monitoring method for filterable PM.

Response:
The CAM Plan that CWLP has submitted for the filterable PM emissions of Boiler 4 relies on monitoring for PM emissions and satisfies the applicable requirements of 40 CFR Part 64, the CAM Rules. However, as discussed by this comment, CWLP did not propose to use the PM CEMS on Boiler 4 as a continuous emissions monitoring system for PM emissions so as to be exempt, pursuant to 40 CFR 64.64.2(b)(vi), from the requirement for a CAM Plan for filterable PM emissions. This comment did show that it is appropriate to require this. In this regard, the CAM Rules provide permitting authorities with the
ability to disapprove CAM Plans submitted by a source if they do not meet the requirements of the CAM rules. However, the CAM rules do not provide the permitting authority with the ability to mandate that, in place of a submitted CAM plan, an emissions monitoring system on an emission unit must be used a “continuous compliance determination method.”

6. Permit Conditions: 7.3.9(h)(i)
Related Conditions: 7.3.9(j)(ii)

Comment:
Condition 7.3.9(h)(i) contains an incorrect citation, "... specified by Condition 7.3.9(k) (ii) ." Condition 7.3.9(k)(ii) does not exist in this permit. The Section is meant to reference Condition 7.3.9(j)(ii) and should be corrected accordingly.

Response:
The identified error in cross-referencing the appropriate permit condition was corrected in the issued permit.

X. Comments Regarding Conditions in Sections 7.4, 7.5 and 7.6 of the Permit

(Existing Coal Handling Equipment)
(Existing Coal Processing Equipment)
(Existing Limestone and Gypsum Handling Equipment)

1. Permit Conditions: 7.4.6(a), 7.5.6(a) and 7.6.6(a)

a. Comment:
Conditions 7.4.6(a), 7.5.6(a), and 7.6.6 require the Permittee to implement and maintain control measures for the material handling and processing equipment and lists examples of those measures, but does not require any specific control measures to be used. For example, Condition 7.4.6(a) states that "The Permittee shall implement and maintain those control measures for the affected operations, that are "established", to minimize visible emissions of particulate matter and provide assurance of compliance with the applicable emission control requirements in Conditions 7.4.4, pursuant to Section 39.5(7)(a) of the Act. "Established" control measures may include enclosure, natural surface moisture, application of dust suppressant and use of dust collection devices, and provide for different control measures depending upon circumstances." (Emphasis added).

As written, the draft CAAPP permit does not require the Permittee to use any specific control measures. Therefore, the permit does not contain sufficient operational requirements to assure compliance with applicable opacity and PM limits for the material handling equipment, as required by 40 CFR 70.6(a). To address this issue, the Conditions identified above must be revised to require the Permittee to implement and maintain the control measures required by the Control Measures Record that is incorporated by reference in Condition 5.2.7.
Response:
Conditions 7.4.6(a)(i) and (ii), 7.5.6(a)(i) and (ii), and 7.6.6(a)(i) and (ii) in the issued permit were revised as suggested by this comment. These conditions now use language identical to comparable conditions in CAAPP permits issued to other coal-fired power plants in Illinois.

The issued permit continues to require Dallman to use specific control measures for the subject operations. While these control measures are not identified in the permit, the issued permit does require Dallman to implement and maintain the specific control measures identified in the Control Measures Record. In particular, the subject conditions are followed by conditions that explicitly require the source to implement and maintain the specific control measures for these operations that have been identified in the Control Measures Record that is required by the permit. For example, for the coal handling operations, following Condition 7.4.6(a)(i), Condition 7.4.6(a)(ii) provides,

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The control measures implemented and maintained shall be identified and operated in conformance with the record required by Condition 7.4.9(b)(i) to satisfy Condition 7.4.6(a)(i), which record is incorporated by reference into this permit by Condition 5.2.7(a).
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b. Comment:
The response that the Illinois EPA provided to USEPA comments does not resolve identified flaws in the permit’s inspection requirements. USEPA commented on the draft CAAPP permit issued for the significant modification in 2013, specifically regarding Conditions 7.2.6(a)(i), 7.3.6(a)(i) and 7.4.6(a)(i) that cover control measures for the coal handling, coal processing, and limestone and gypsum handling equipment. These conditions, which have been renumbered as Conditions 7.4.6(a)(i) and 7.5.6(a)(i) of the Draft Permit, state:

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The Permittee shall implement and maintain those control measures for the affected [operations/processes] that are established, to minimize visible emissions of particulate matter and provide assurance of compliance with the applicable emission [control requirements/standards] in Conditions [7.4.4/7.5.4], pursuant to Section 39.5(7)(a) of the Act.
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USEPA stated:

As written, the draft CAAPP permit does not require the Permittee to use any specific control measures for coal handling and processing equipment. The draft permit allows the Permittee to select any type of control measure(s), and provides the Permittee discretion to change those control measures. Therefore, the draft CAAPP permit does not comply with 40 CFR 70.6(a) because it does not contain sufficient operational requirements to assure compliance with the applicable opacity and PM limits for coal handling and processing equipment. In addition, the draft permit does not provide the public with the opportunity to meaningfully comment on the selected control measures.
Illinois EPA’s Responsiveness Summary for the Significant Modification of the CAAPP Permit issued to City Water, Light & Power for the Dallman Generating Station, issued October 2013 (“CWLP Responsiveness Summary”) at 20.

USEPA recommended that:

Illinois EPA revise Conditions 7.3.6(a)(i) and 7.4.6(a)(i) to specify the minimum set of control measures for the coal handling and processing equipment. Additionally, Conditions 7.3.9(b)(i) and (ii) and 7.4.9(b)(i) and (ii) should be revised to require review and approval by Illinois EPA of the control measures selected by the Permittee and revised to provide the pertinent information on the control measures.

CWLP Responsiveness Summary

In response, Illinois EPA stated that:

The permit conditions addressed by the comment require CWLP to implement control measures on the affected operations, as well as to “operate and maintain” those measures on an on-going basis. The permit also requires CWLP to create and maintain a list of various control measures being implemented, which are currently identified in the permit as natural surface moisture, various dust suppressants, enclosures and covers, and to apprise the Illinois EPA of revisions to the list. The associated inspection and recordkeeping requirements are designed to ensure that the control measures are being followed. Cumulatively, these control measures, recordkeeping and inspections establish the permit’s approach to periodic monitoring for these affected operations.

CWLP Responsiveness Summary (references omitted).

The Illinois EPA’s response is inadequate for several reasons. The language requiring control measures “to assure compliance” is unclear and unenforceable. See In re Cash Creek Generation, LLC, Permit No. V-09-006, 2012 EPA CAA Title V Lexis 5, *94-*96 (USEPA June 22, 2012). Allowing the Permittee to make the decision as to what measures “assure compliance” – instead of clearly setting out those measures in the Permit – renders these conditions subjective and, therefore, unenforceable by the Illinois EPA or a citizen.

Response:
The USEPA commented again on Conditions 7.4.6(a), 7.5.6(a) and 7.6.6(a) of the Dallman permit in letter dated September 8, 2016. See Illinois EPA’s above response to the USEPA comment which also addressed concerns raised by the above comment.

2. Permit Conditions: 7.4.8, 7.5.8, 7.6.8 and 7.7.9

Comment:
USEPA has a number of concerns with the draft permit’s requirements to assure compliance with the opacity and PM emission limitations in the permit as required by 40 CFR 70.6(a)(1). EPA’s specific comments regarding these issues are provided below.
To control PM and opacity emissions from material handling equipment, the Permittee uses, among other things, natural surface moisture, water atomized foggers, baghouses and dust suppression. These measures are identified in the Control Measures Record, which is incorporated by reference into the draft permit by Condition 5.2.7(a). To assure compliance with the applicable emission limits, the draft permit requires performance of: monthly inspections; annual VE observations in accordance with EPA Method 22; and annual VE observations in accordance with EPA Method 9.

The draft permit's inspection and monitoring requirements are not adequate to yield reliable and accurate emissions data that are representative of the Permittee's compliance with applicable PM and opacity limits, as required by 40 CFR 70.6(a)(3)(i)(B) and 70.6(c)(1). The frequency of inspections and monitoring will not provide sufficient data to determine whether the control measures being used are adequate and whether alternative control measures must be employed. This is because, among other things, the majority of the affected equipment operates continuously year-round; the permit allows for substantial variation in the type of control measure used; and weather conditions can have significant impacts on the adequacy of using natural surface moisture to control emissions. See also comment number two of EPA's December 21, 2012 letter regarding the draft CWLP permit.

USEPA recognizes that the Permittee has conducted PM and opacity emissions testing that shows compliance with the applicable permit limits. However, the testing results do not contain enough data to provide a reliable and accurate picture of PM and opacity emissions from the material handling equipment to justify the frequency of inspections. Additionally, the PM testing did not address how the Permittee quantified PM emissions from the equipment. Furthermore, the testing information did not specify which, if any, of the control measures other than natural surface moisture the Permittee implemented during testing.

To address the above concerns, Conditions 7.4.8(b), 7.5.8(b), 7.6.8(b), and 7.7.9(a) should be revised to require the Permittee to conduct a Method 22 test at least once per day for each affected operation during normal operation. These daily observations may be performed by the plant operators involved in day-to-day operations who decide on a daily basis whether to operate additional control measures. The permit should also identify appropriate next steps if emissions are observed, such as corrective action and/or Method 9 observations. Alternatively, the permit could require installation and operation of video monitoring equipment to monitor visible emissions from the material handling and processing equipment and require appropriate next steps if emissions are observed.

Response:
In the issued permit, in response to this comment, an additional compliance requirement has been included for the coal storage pile operations (new Condition 7.4.8(c)). During warmer weather, May through November of each year, the issued permit requires the source to conduct a visual survey of these operations twice a month. From December through April, a visual survey is only required monthly.
Each survey must include either an observation for visible emissions or for opacity.\textsuperscript{108} For the storage pile operations, this provision addresses the potential role of weather, as mentioned in this comment, in the emissions of the storage piles and the control measures that are implemented. In particular, during warm weather, water evaporates more quickly and the exposed coal at the surface of a pile will dry, reducing its natural moisture content and increasing its potential for emissions.\textsuperscript{109} Inspections of the coal pile conducted twice a month during warmer weather to address this potential for higher emissions. For material handling operations other than the coal storage piles, the material is not exposed to the open air for an extended period of time at the source so that drying has, at most, a minimal effect on emissions.

In other respects, the frequency of the formal inspections that is required as part of the Periodic Monitoring for the subject operations is reasonable. With regard to the coal handling and coal processing and limestone handling operations, these operations have a long-standing history of compliance. They operate with a substantial margin of compliance. The control measures that address emissions from the units are robust. That is, they are not easily interrupted or damaged. Because of the rudimentary nature of the control measures, they are also not at risk of upsets if their operation is not closely tracked. The operation and performance of these operations and their control measures is also directly apparent to the staff that operate them on a day-to-day basis as part of the receiving, handling and storage of material. The required frequency of inspections is consistent with the standard

\textsuperscript{108} New Condition 7.4.8(c) provides that these visual surveys must include either observations for visible emissions or opacity from the coal storage pile. Observations for visible emissions must be conducted in accordance with 35 IAC 212.107, which provides that such observation must be conducted in accordance with USEPA Method 22. The total duration of observations for visible emissions must be at least 10 minutes. As an alternative to conducting observations for visible emissions, CWLP may elect to conduct an observation for opacity from the storage pile in accordance with USEPA Method 9, with at least one determination of opacity, 6-minute average, for the storage pile.

If visible emissions are observed going beyond the property line or the average of opacity observations is greater than 20 percent, this new condition requires that, within two hours, CWLP take action if needed to assure compliance with the 30 percent opacity standard in 35 IAC 212.123(a).

\textsuperscript{109} This provision is also considered appropriate as the source indicated that secondary control measures may be used for the coal pile “when handled coal is unusually dry.”
requirement for compliance inspections for these types of operations in the NSPS for Coal Preparation Plants, 40 CFR 60 Subpart Y.\textsuperscript{110}, \textsuperscript{111}

As discussed in the comment, the source had observations for opacity conducted for these operations.\textsuperscript{112}, \textsuperscript{113} The observations do not show that these formal inspections should be required more frequently.

\textsuperscript{110} Under the NSPS for Coal Preparation Plants, 40 CFR 60 Subpart Y, for a subject facility that is subject to an opacity standard and is not controlled with a scrubber, 40 CFR 60.255(b)(2) provides that after the initial performance test or observations for opacity are conducted for new coal handling operation subject an opacity standard, periodic observations of opacity must be conducted as follows. The new facilities that are subject to these requirements are subject to an NSPS opacity standard of 10 percent, six-minute average, pursuant to 40 CFR 60.254. Accordingly, the criterion for periodic observations of opacity on a quarterly basis would be half of 10 percent, or 5 percent.

For each affected facility subject to an opacity standard, an initial performance test must be performed. Thereafter, a new performance test must be conducted ....

(i) If any 6-minute average opacity reading in the most recent performance test exceeds half the applicable opacity limit, a new performance test must be conducted within 90 operating days of the date that the previous performance test was required to be completed.

(ii) If all 6-minute average opacity readings in the most recent performance test are equal to or less than half the applicable opacity limit, a new performance test must be conducted within 12 calendar months of the date that the previous performance test was required to be completed.

Daily observations for visible emissions and use of a digital opacity monitoring for subject facilities are not mandated by 40 CFR 60 Subpart Y. Rather, 40 CFR 60.255(f)(1) and (2) provides that the owner or operator of a subject facility may elect to monitor a subject operation using one of these approaches as an alternative to conducting opacity observations on a quarterly or annual basis, as appropriate.\textsuperscript{111} Under the NSPS for Nonmetallic Mineral Processing Plants, 40 CFR 60 Subpart I, for new non-metallic mineral handling operations whose fugitive emissions are subject to a 10 percent opacity standard and that use wet suppression to control emissions, 40 CFR 60.674(b) requires inspections of the wet suppression systems on a monthly basis. These inspections are not required to include observations for visible emissions. In addition, these operations are exempt from the requirements to conduct periodic performance testing for opacity at least every 5-years, as would otherwise be required.

\textsuperscript{112} For the Existing Coal Handling Equipment, Coal Processing Equipment and Limestone/Gypsum Handling Equipment, as required by the 2013 CAAPP permit, the source submitted reports for opacity observations completed in June 2013, June 2014 and October 2015. Plant personnel conducted the Method 9 opacity observations on emissions to verify compliance with the opacity limits for the subject equipment.

As required by the 2013 permit, CWLP submitted its initial Control Measures Record for the Coal Handling Equipment, Coal Processing Equipment and Fly Ash Handling Equipment to the Illinois EPA on July 11, 2013.\textsuperscript{113} Observations of opacity were completed November 3\textsuperscript{rd} and 4\textsuperscript{th}, 2016 on emission points for these units. All observations conducted demonstrated a significant margin of compliance with the applicable opacity limits in 35 IAC 212.123 and 40 CFR Part 60 Subpart Y. The opacity observed for each individual observation was never greater than five percent. The observations were performed while the control measures specific to each emission were operating consistent with the Control Measures record (i.e.; the observation forms document covers, enclosures, moisture content, building, etc.).
While the operational conditions under which the opacity observations were conducted may not have been as well documented as the commenter, and the Illinois EPA, would have liked, this is not a reasonable basis to now mandate more frequent inspections of these operations. In fact, measurable opacity was not observed from most of these operations. When appropriately considered on a six-minute average, consistent with the compliance averaging period of 35 IAC 212.123, the highest opacities that were observed were only 5.00 percent for gypsum unloading and 3.33 percent for gypsum piles. These are well below the applicable standard pursuant to 35 IAC 212.123, 30 percent.

As to the suggestion in this comment that all required inspections should include observations for visible emissions, the comment is effectively asking that the permit impose a substantive requirement of the subject operations. This is because applicable rules do not prohibit visible emissions from the subject operations. The identification of the specific corrective actions that the source must take in the event of visible emissions would also constitute establishment of new substantive requirements in the permit.

Deficiencies of this type for observations and testing are appropriately addressed by further evaluation, investigation and, possibly, requiring that such observations or testing be repeated with additional documentation for the conditions during such observations or testing to be kept.

Upon evaluation, the Illinois EPA has concluded that it is not appropriate to require that these observations be repeated. It is reasonable to assume that during the period in which observations were conducted, these operations were being operated as they are normally operated and not in a way that was not representative of normal operation.

It is also relevant that this comment has been made by USEPA several years after repeated discussions with staff at USEPA Region 5 concerning the basis for resolving the appeals of the initial CAAPP permits. These discussions between technical and legal personnel of USEPA and the Illinois EPA evolved around the appropriate refinements to the approach to Periodic Monitoring for the subject operations. As the Illinois EPA explained, the approach in the initial permits with annual observations of opacity by Method 9 was being reduced in frequency to accommodate a revised monthly inspection protocol, with the possibility for follow-up corrective actions of Method 9 observations. During these discussions, USEPA staff did not suggest that a reduction in the frequency of Method 9 observation would create an unworkable permit. Given the subsequent absence of comment or formal objection by USEPA during the last stages of the revisions to permits in 2012 and 2013, it was believed that the revised approach was acceptable.

While 35 IAC 212.301 addresses visible emissions of fugitive particulate matter, it does so at the property line of a source. 35 IAC 212.301 provides for the dispersal of fugitive emissions that occur over plant property between the unit(s) generating the emissions and the property line of the source. In addition, 35 IAC 212.301 prohibits visible emissions of fugitive particulate matter only if they would be visible by an observer at or beyond the property line looking directly overhead. It does not prohibit fugitive emissions that are visible by an observer looking toward the source or along the property line. In addition, 35 IAC 212.314 provides that 35 IAC 212.301 is not applicable during periods of elevated wind, i.e., winds greater than 25 mph, on an hourly average.

Given these considerations, the nature of the subject operations and the applicability of 35 IAC 212.123, which directly limits the opacity of emissions from the subject operations, 35 IAC 212.301 is not expected to constrain the emissions of the subject operations in practice. However, a new condition has been included in the issued permit, Condition 5.2.2(a)(ii), to directly address compliance with 35 IAC 212.301. It provides that, upon request by the Illinois EPA, the source must conduct
Finally, video monitoring equipment is clearly not appropriate for the subject operations. Visible emissions are not prohibited by the applicable substantive requirements that do apply to the subject operations. The operations are not currently the cause of either a real or alleged dust nuisance.

3. Permit Conditions: 7.4.8(b), 7.5.8(b), 7.6.8(b) and 7.7.9(a)(i)

**Comment:**
USEPA also commented on the draft CAAPP permit in 2013 regarding conditions 7.3.8(b), 7.4.8(b), 7.5.8(b) and 7.6.8(b) that cover inspection requirements for the coal handling, coal processing, gypsum/limestone handling, and fly ash equipment. With the exception of the condition that pertains to coal processing equipment which has been omitted entirely, these conditions now appear at 7.4.8(b), 7.6.8(b) and 7.9(a)(ii). USEPA stated that “it is not clear how the draft CAAPP permit inspection requirements and frequency of the required VE observations are adequate to yield reliable and accurate emissions data, as required by 40 CFR 70.6(a)(3)(i)(B).” CWLP Responsiveness Summary at 22. USEPA recommended that the conditions “should include additional monitoring and/or testing to yield the reliable data that assures compliance on a continuous basis.” Id. In response, Illinois EPA defended the periodic monitoring contained in those conditions. Illinois EPA pointed out a key component of the periodic monitoring is an on-going requirement that CWLP operate and maintain designated control measures for the equipment on an as-needed basis or, similarly stated, as necessary to assure compliance. This obligation, which is required whenever equipment is operating and material is being handled, is now codified in the permit, although various uses of control measures have long been practiced by CWLP and the other utility sources.

*Id.* at 23 (references omitted). Illinois EPA’s response is inadequate for several reasons. First, Illinois EPA claims that the language is “now codified in the permit” but it is unclear what language Illinois EPA is referring to.

In the CWLP Responsiveness Summary, Illinois EPA also points out that “more frequent observations for visible emissions would not provide useful information.” CWLP Responsiveness Summary at 24. It is difficult to comprehend why this is the case when one permit condition already requires that “[a]s part of the inspections of Condition 7.4.8(a), the Permittee shall perform observations of the affected processes for visible emissions in accordance with Reference Method 22 to confirm compliance with the requirements of Condition 7.4.4(b).” Draft Permit at Condition 7.4.8(b); see also Conditions 7.6.8(b), 7.7.9(a)(ii). If observations are useful for confirming compliance with the permit requirements, it would seem to

daily observations at the property line for a week to address compliance with 35 IAC 212.301. This requirement addresses the unlikely circumstance that the emissions from the subject operation(s) would be such that compliance with 35 IAC 212.301 might be put into question.
be that more frequent observations would be useful for confirming compliance more frequently. As Illinois EPA pointed out:

[T]he absence of visible emissions is a criterion that will act to simplify the periodic inspections for certain equipment... For such equipment, the absence of visible emissions will likely readily confirm proper implementation of control measures.

CWLP Responsiveness Summary at 24 (references omitted). Similarly, more frequent observations confirming the absence of visible emissions will more frequently confirm the proper implementation, operation and maintenance of control measures. In sum, the conditions that Illinois EPA pointed to as addressing USEPA’s concern are subjective, circular, unenforceable and do not adequately respond to USEPA’s previous comment. USEPA’s comment that the CWLP permit inspection requirements are not adequate to yield reliable and accurate emissions data, as required by 40 CFR 70.6(a)(3)(i)(B), CWLP Responsiveness Summary at 27, still applies and it is reiterated as to the Reopened Permit.

Furthermore, the Draft Permit completely omits Condition 7.4.8(b) of the Significant Modification Permit, which pertains to VE observations of coal processing equipment. Illinois EPA justified this omission by stating that the coal processing equipment is located inside of a building and could not be observed using Reference Method 22 or Method 9. Statement of Basis at 35. This reflects a change in policy of Illinois EPA, which in 2013 specifically stated that the permittee would be required to inspect for the absence of visible emissions from the coal crushers inside of a closed building. CWLP Responsiveness Summary 24. Moreover, it is insufficient for Illinois EPA to justify this change simply because the equipment is located inside of a building. According to USEPA’s discussion of observation locations in its guidelines regarding Reference Method 22, an applicant can make “outside observation[s] of emissions escaping the building/structure or inside observation[s] of emissions directly emitted from the affected facility process unit.” 40 CFR Part 60 App A-7. Therefore, please answer the following questions:

1) Why can CWLP not make observations under Reference Method 22?

2) Have CWLP and Illinois EPA investigated whether it is possible to observe the visible emissions from the coal crushers indoors using some other method?

3) Have CWLP and Illinois EPA investigated whether it is possible to observe the visible emissions from the building in which the coal crushers are located?

Given that the Draft Permit’s control measures that include the observations of visible emissions are already insufficient to assure of compliance, it is concerning that the even these control measures have now been stripped away with respect to coal processing equipment.

Response:
A section of the permit addressing coal processing equipment was not removed in the draft permit as stated in this comment. In the draft permit, the sections of the permit for coal handling and coal processing were shifted and re-numbered due the addition of Section 7.3 for Boiler 4. This comment may have been referring to Section 7.5 for ash handling equipment in the 2013 permit. This section was not carried over into the draft permit because it addressed dry fly ash handling associated with the Lakeside Boilers and this equipment has been permanently removed from service. The management of ash at the station is discussed further in the responses to comments related to Section 7.7 of the permit.

The use of the word "codified" in the phrase "now codified in the permit" from the 2013 Responsiveness Summary simply meant that requirements to use control measures for material handling and storage operations are now stated in writing in the permit. The use of such control measures is no longer implicit.

With regard to inspections for material handling and storage operations, the USEPA commented again on Conditions 7.4.8, 7.5.8, 7.6.8 and 7.7.9 of the Dallman permit in letter dated September 8, 2016. See Illinois EPA’s above response to the USEPA comment which also addressed concerns raised by the above comment regarding conduct of inspections.

In regard to the removal of Condition 7.4.8(b) in the 2013 permit, as noted in this comment the requirement to complete annual visual emission observation was removed from the permit because the coal crushers are located inside of a building. Upon further consideration, Illinois EPA agrees that this condition should not have been removed from the permit. This issued permit contains Condition 7.5.8(b) which had been removed in the draft permit.

4. Permit Conditions: 7.4.9(b)(i), 7.5.9(b)(i) and 7.6.9(b)(i)

Comment:
The Control Measures Record includes primary control measures and, for certain emission sources, secondary control measures. The Control Measures Record allows the source to operate control measures "as needed". The Illinois SIP, Control Measures Record, and the draft permit do not define the term "as needed." Therefore, it is not clear to the source, the public, or Illinois EPA when the source should the control measures that include this language. Terms for demonstrating compliance with applicable requirements must be clearly described so that the permit language is clear and enforceable as a practical matter.

Illinois EPA must revise the permit and/or Control Measures Record to define the term "as needed" or revise the language such that the events that require the implementation of the control measures affected by this language is clear and enforceable. The language must ensure that the source can demonstrate continuous compliance with applicable emission limitations.

Response:
In investigating this comment Illinois EPA discovered that language regarding the content of the Control Measure Record in Conditions 7.4.9(b)(i), 7.5.9(b)(i) and 7.6.9(b)(i) of the current CAAPP permit, issued in 2013, had been inadvertently removed from the CAAPP permit proposed in this permitting action. As a result, current Conditions 7.4.9(b)(i), 7.5.9(b)(i) and 7.6.9(b)(i) were revised to include the language used in CAAPP permits issued to other coal-fired power plants regarding the content of the Control Measures Record. Other Conditions referencing the Control Measures records were also revised to be consistent with CAAPP permits issued to the other coal fire power plants.

As a result, these relevant conditions in the issued permit that address secondary control measures do not use the phrase “as needed.” These measures are addressed in the permit conditions that lay out the required content for the “Control Measures Record.” These conditions clearly provide that secondary control measures identified in this record must be used in the circumstances that are specified in this record. For example, for the coal handling operations, Condition 7.4.9(b)(i)(D) provides that this record must include the following information with respect to secondary control measures.

Description of any secondary control measures that would be used based on circumstances (freezing temperatures, recent rain, dry weather, etc.) with identification of the circumstances in which they would be used and whether they would take the place of or supplement the primary control measures. (Emphasis added)

XI. Comments Regarding Conditions in Section 7.7 of the Permit

(New and Modified Bulk Material Handling, Processing and Storage Operations Associated with Dallman Boiler 4)

1. Permit Conditions: Section 7.7
   Related Conditions: Section 7.5 of 2013 permit

Comment:
In the draft permit, the requirements for fly ash handling apply to only Dallman Unit 4. The Permit must have fly ash handling requirements that apply to all fly ash at the Station and not just fly ash at Unit 4. In 2013 Permit, Section 7.5 applied to fly ash at Boilers 31/32 and 33, all the coal-fired boilers at the Station addressed by that CAAPP permit. In the course of drafting the reopener, the contents of the permit were reorganized, and the fly ash requirements were removed from Section 7.5 which in the current version of the Permit now applies to “Existing Coal Handling Equipment”. Permit at 5, 14, 154. In fact, the Permit separates coal and material handling provisions for existing units from coal and material handling provisions for the new Unit 4. Similar to Section 7.5, Section 7.4 covers “Existing Coal Handling Equipment” and Section 7.6 covers “Existing Limestone and Gypsum Handling Equipment”. Permit at 5, 14, 146, 162. Nonetheless, none of those
sections cover material handling for fly ash at Boilers 31/32 and 33. *Id.*

Section 7.7 is the only section that contains conditions that apply to fly ash handling and Section 7.7 explicitly applies to only Boiler 4. Permit at 5, 14, 170. Condition 7.7.1 states that “[t]he affected units for the purpose of these unit-specific conditions are equipment and facilities handling coal and other bulk materials that are involved with the operation of Dallman Boiler 4.” Permit at 170. Condition 7.7.2 states that “[t]he “affected units” are the emission units identified as “Receiving, Processing, Transfer and Storage Operations for Bulk Material (coal, limestone, flyash, and gypsum) Associated with Boiler 4.” Permit at 170.

If Section 7.7 applies to fly ash solely from Boiler 4, then the permit does not contain any conditions that apply to fly ash from Boilers 31/32 and 33. If Illinois EPA intended for Section 7.7 to apply to all the fly ash at the facility, then the language indicating that the conditions only apply to material (fly ash) handling “associated with Boiler 4” and all other language limiting the applicability of the fly ash provisions to Boiler 4 must be removed.

**Response:**
Section 7.5 of the 2013 permit for ash handling equipment was not carried over into the draft permit because this permit section was related to dry fly ash handling from the Lakeside Boilers and this equipment has been permanently removed from service. Ash from Boilers 31, 32 and 33 is managed wet and is not addressed by the CAAPP permit. The only dry fly ash handling at Dallman is related to Boiler 4 and is addressed by Section 7.7 of the issued permit.

2. **Permit Condition:** 7.7  
**Related Conditions:** 7.4, 7.5 and 7.6

**Comment:**
The draft permit does not identify the emission units that are subject to Condition 7.7, thereby making the terms and conditions of the permit practically unenforceable.

Condition 7.7 includes requirements for "New and Modified Bulk Material Handling, Processing and Storage Operations Associated with Dallman Boiler 4." Condition 7.7.1 states, in part, that "[t]he affected units for the purpose of these unit-specific conditions are equipment and facilities handling coal and other bulk materials that are involved with the operation of Dallman Boiler 4 and that have the potential for PM emissions."

This description does not provide enough information to identify the material handling equipment that is subject to the requirements in Condition 7.7 and to distinguish those units from the material handling equipment subject to Conditions 7.4 and 7.5. As written, the public, regulatory authorities, and the source would be unable to determine the specific equipment subject to the requirements in Condition 7.7, thereby making those requirements unenforceable. Condition 7.7 must be revised to clearly identify which emission
units are subject. For example, subject units could be given an identification name or number that would distinguish them from the material handling and processing equipment subject to Conditions 7.4 and 7.5.

Response:
The Illinois EPA has worked with CWLP to specifically identify the emissions units which are addressed by each section of the CAAPP permit. Since the Control Measures Record (CMR) must identify all material handling emission units the record has been modified to specify the section of the permit that applies to the emission unit.

3. Permit Conditions: 7.7.5(a)(i) and (iii)
Related Conditions: 7.7.10(b)

Comment:
USEPA has a number of concerns with the draft permit's requirements to assure compliance with the opacity and PM emission limitations in the permit as required by 40 CFR 70.6(a)(1). EPA's specific comments regarding these issues are provided below.

Condition 7.7.5 requires use of control measures that are not identified in the permit.

Condition 7.7.5(a)(i) requires the Permittee to implement and maintain control measures for subject units without requiring that any specific control measures be used. Additionally, Condition 7.7.5(a)(iii) requires the Permittee to operate and maintain subject units with the control measures identified in the records required by Condition 7.7.9(b). However, Condition 7.7.9(b) does not identify any control measures or required records of control measures.

The operation of identified control measures are necessary to demonstrate compliance with applicable requirements as required by 40 CFR 70.6(a)(3)(i)(B) and Section 39.5(7)(a) of the Act. Condition 7.7.9(b) must be revised to include the required control measures necessary for the emission units to demonstrate continuous compliance with applicable requirements. Alternatively, Condition 7.7.5(a) and the Control Measures Record may be revised, so that Condition 7.7.5(a) requires the Permittee to implement the control measures identified in the Control Measures Record. Additionally, the Control Measures Record would need to be updated to include control equipment and control measures that apply to the emission units in Condition 7.7.

Response:
The Illinois EPA agrees with the comment regarding 7.7.5 and 7.7.10 (above comment refers to this condition as 7.7.9, refer to next comment) which inadvertently made cross reference errors in Condition 7.7.5(a)(iii) and left out the required content for the Control Measures Record. The cross references have been corrected in the issued permit to now reference Conditions 7.7.5(a)(i) and (ii) and Condition 7.7.10(b). The list of Control Measures Record

\[117\] Condition 7.7.5(a)(iii) refers to Conditions "7.7.5(i) and (ii)". This appears to be a typographical error and should be revised to include the appropriate conditions.
items is now added to Condition 7.7.10(b) in the issued permit. With these corrections to the permit, operation of identified control measures are now necessary to demonstrate compliance with applicable requirements.

4. Permit Conditions: 7.7.5(a)(iii) and 7.7.10(b)(i)

Comment:
Condition 7.7.5 (a)(iii) should reference the records in 7.7.10(b)(i), not 7.7.9 (b). In congruence with that Condition 7.7.10(b)(i) should reference Condition 7.7.5 (a)(iii), not 7.7.6 (a)(iii) which does not exist in this permit.

There is also a minor typo in Condition 7.7.10(b)(i) which states, "as required by with Condition 7.7.6(a)(iii)." The "with" should be removed.

Response:
The identified errors in cross-referencing appropriate permit conditions and the typographical error were corrected in the issued permit.

5. Permit Condition: 7.7.7(a)(i)

Comment:
a. Condition 7.7.7(a)(i) does not include the authority for the testing requirements.

Condition 7.7.7(a)(i) addresses testing requirements for determining whether the source is in compliance with applicable opacity requirements. However, there is no indication where the underlying applicable requirement comes from.

As required by 40 CFR 70.6(a)(1)(i) and Section 39.5(7)(n) of the Act, this permit must be revised to specify and reference the origin of and authority for each term and condition.

Response:
The issued permit now has an origin of authority that cites to the CAAPP authority in the Act (39.5(7)(b) and (c) which implements the Title V requirement for all permits to contain sufficient monitoring and testing to demonstrate compliance with all applicable requirements. As the comment states Condition 7.7.7(a)(i) has been established to address whether the source is in compliance with applicable opacity requirements in Condition 7.7.7-3.

6. Permit Conditions: 7.7.11(a)

Comment:
Reporting When Control Measures Are Not in Compliance

There are several problems with Draft Condition 7.7.11(a)(i). This condition would require CWLP to notify the Illinois EPA of incidents in which it continued to operate process emission units that handle fly ash for more than 24 operating hours “from the start of a particular event.”
Condition 7.7.11(a)(i) is also problematic because, in contrast to the same Condition in the 2013 Permit (Condition 7.5.10), it only requires reporting when control measures are not present or operating, rather than when control measures are not in compliance with applicable requirements. Limiting CWLP’s responsibility to report instances of noncompliance reduces the volume of information Illinois EPA receives regarding violations of the Station’s operating conditions. Obviously, noncompliance is not a matter that should be treated lightly or go unreported.

Finally, Condition 7.7.11(a)(i) extends the amount of time that would trigger reporting. Whereas the 2013 Permit only required reporting after two operating hours, the Draft Permit would require reporting after 24 operating hours. This increase in time also lessens Illinois EPA’s (and the public’s) understanding of compliance problems at the Station. The Draft Permit should therefore be revised to return to the two-hour reporting trigger contained in Condition 7.5.10 of the 2013 Permit.

Response:
First, it should be made clear that Section 7.7 addresses not only fly ash, but also all other new and/or modified bulk material handling systems (see Condition 7.7.2). Further clarification has been given to which emission units are covered in Section 7.7 as a result of a comment which is addressed later in this document. Additionally, Section 7.7 did not exist in the 2013 CAAPP permit. Section 7.7 was added to the permit as part of the reopening to address new applicable requirements under the PSD construction permit for Boiler 4. Any comparison to the old Section 7.5 which covered Lakeside boilers dry ash handling is not relevant.

Notwithstanding the above, Condition 7.7.11(a)(i) does not limit CWLP’s responsibility to report instances of noncompliance. Condition 7.7.11 addresses a 30-day notification for those events that are excessively continuing (longer than 24 hours). Condition 7.7.11(a)(ii) addresses a quarterly notification for all events for which there was a deviation from emission standards. The requirements have not changed for requiring CWLP to report all instances of deviations. The Conditions work together to provide for more flexibility to obtain more “volume of information” where such emergency instances require it.

XII. Comments Regarding Conditions in Section 7.9 of the Permit

(Emergency Distillate Oil-Fired Engine-Generators)

1. Permit Conditions: 7.9.6(b)(ii) and (iii)
Related Conditions: 7.9.9(a), (c), (d) and (g) and 7.9.1--2

Comment:
The testing requirements and emissions calculation methodology for Emergency Distillate Oil Fired Engine-Generator in Conditions
7.9.6(b)(ii) and (iii) do not assure compliance with applicable limits for emissions of nitrogen oxides (NOx).\textsuperscript{118}

Condition 7.9.6(b)(ii) limits the NOx emissions of the three engines covered by Section 7.9 of the permit (ENG1, ENG2 and ENG3) to 39.5 tons per year. This limit appears to be a "synthetic minor" limit that was established to prevent the engines from being subject to major New Source Review requirements. Condition 7.9.6(b)(iii) provides that this limit applies as an annual limit, rolled monthly. Although the permit would include some recordkeeping and reporting on the fuel usage, along with a requirement to determine NOx emissions on a monthly basis, it does not include the appropriate testing and emissions calculation methodology needed to determine monthly emissions.

As required by 40 CFR 70.6(c)(1), the permit must contain the appropriate monitoring, testing, reporting and recordkeeping in order to demonstrate compliance with the applicable requirements. In this case, that means that the permit must require that the engines are tested on a set frequency to verify the NOx emission factor used to determine emissions and assure compliance with applicable requirements. Currently, there are no testing requirements for NOx emissions from the engines. The revised permit must include initial performance testing along with follow-up testing thereafter to determine the NOx emissions and verify the emission factors that will be used to calculate emissions monthly and determine compliance with the annual limit.

Condition 7.9.6(b)(iii) addresses compliance with the applicable annual limit. The condition requires that CWLP determine emissions on a monthly basis in order to demonstrate compliance with the annual limit by summing the data of the current month plus the preceding 11 months. However, the permit is not clear regarding how CWLP will calculate the data that will be used to determine compliance with the annual limit. As required by 40 CFR 70.6(c)(5)(iii)(B), the permit must identify the means used by CWLP for determining the compliance status with each term and condition of the permit. USEPA has further stated that emissions shall be determined or measured for assessing compliance with corresponding applicable limits, such as the NOx limit set for these emergency engines. See In the Matter Of Hu Honua BioEnergy Facility, Petition Number IX-2011-1 (Order on Petition), February 7, 2014, at 7-14. The revised permit and/or the permit record must provide an appropriate methodology that will be used to determine emissions every month.

Response:

The Periodic Monitoring in the draft permit, as now contained in the issued permit, is sufficient to address the limit for the annual NOx emissions of these engines. These engines are emergency engines and

\textsuperscript{118} Note that the United States Court of Appeals for the D.C. Circuit has vacated portions of the NESHAP for Stationary Reciprocating Internal Combustion Engines, 40 CFR Part 63 Subpart ZZZZ. Delaware v. EPA, 785 F.3d (D.C. Cir. 2015). The vacated provisions, 40 CFR 63.6640(f)(4)(ii) and (iii), had specified that emergency engines could operate for a limited number of hours per year under certain circumstances unrelated to emergencies.
do not routinely operate. CWLP indicates that these engines were operated for a combined total of less than 20 hours in 2016, i.e., annual NOx emissions of less than 0.5 tons. The engines were also only operated for the purpose of operational readiness checks. Accordingly, the permit adequately addresses compliance with the subject limit as it requires CWLP to keep records for the operation of the engines (Conditions 7.9.9(a) and (c)); records with documentation for the hourly emission rates of the engines (Condition 7.9.9(d)); and records for the monthly and annual NOx emissions of these engines (Condition 7.9.9(g)). In addition, Condition 7.9.10-2 of the permit requires CWLP to notify the Illinois EPA in the unlikely event that the NOx emissions of these engines exceed 32.0 tons in a calendar year.119 This will facilitate scrutiny by the Illinois EPA of CWLP’s recordkeeping for the NOx emissions of these engines if their actual emissions are close to the applicable limit.

It should be noted that both 40 CFR 70.6(c)(3)(B) and Section 39.5(7)(d)(ii) of the Act provide that recordkeeping designed to serve as monitoring may be sufficient as Periodic Monitoring in the absence of an applicable requirement that requires periodic emission testing or instrumental monitoring. The comment did not show that the recordkeeping and reporting requirements in the draft permit would not be sufficient to address compliance of these engines with the applicable limit for annual NOx emissions.

2. Permit Condition: 7.9.10-2(a)

Comment:
Condition 7.9.10-2(a) provides for reporting if the annual NOx emissions of the oil-fired engine/generators exceed 32 tons. However, there is not a citation of authority for this requirement. As required by 40 CFR 70.6(a)(1)(i) and Section 39.5(7)(n) of the Act, this permit must specify and reference the origin of and authority for each term and condition.

Response:
The issued permit now has an origin of authority that cites to the CAAPP authority in the Act (39.5(7)(b) and (f) which implements the Title V requirement for all permits to contain sufficient monitoring and reporting to demonstrate compliance with all applicable requirements. As the comment states Condition 7.9.10-2(a) has been established to address whether the source is in compliance with applicable NOx requirements in Condition 7.9.6(b).

XIII. Comments Regarding Conditions in Section 7.12 of the Permit

119 With this notification, CWLP must: 1) Provide data for the monthly and annual NOx emissions of the engines for the subject calendar year and the preceding two calendar years; 2) Identify any specific circumstances that led to emissions being more than 32.0 tons in such year; and 3) If appropriate, explain why similar circumstances should not be expected in subsequent years.
(Roadways and Other Open Area Sources of Fugitive Dust)

1. Permit Conditions: 7.12.8(a)

Comment:
USEPA has a number of concerns with the draft permit's requirements to assure compliance with the opacity and PM emission limitations in the permit as required by 40 CFR 70.6(a)(l). EPA's specific comments regarding these issues are provided below.

Condition 7.12 regarding monitoring requirements for roadways and other open area sources of fugitive dust omits elements necessary to demonstrate compliance with applicable requirements.

Condition 7.12.11(b) establishes that compliance with the fugitive PM standard in Condition 7.12.4(a) is addressed by, among other things, the monitoring requirements in Condition 7.12.8. Condition 7.12.8(a)(ii) requires the Permittee to conduct compliance observations on at least quarterly basis to verify opacity levels and confirm the effectiveness of the operating program in controlling emissions.

As written, Condition 7.12.8(a)(ii) does not specify the type of "compliance observations" that are required to verify opacity levels and confirm compliance with the fugitive PM standard in Condition 7.12.4. In order to verify opacity levels, the only method of observation that would yield accurate and reliable opacity readings would be those conducted in accordance with EPA Method 9. Therefore, Condition 7.12.8(a)(ii) must be revised to require compliance observations according to EPA Method 9.

Response:
The Illinois EPA agrees with the comment in that the Method and compliance demonstration description was inadvertently left out of the permit. The compliance demonstration method is one that is specified in 35 IAC 212.109. The issued permit now contains the specifics as to the compliance methodology which is according to EPA Method 9 as Condition 7.12.8(a)(i)(B).

XIV. Comments Regarding Other Conditions in the Permit

1. Conditions in the Draft Permit Designated "T1"

Comment:
Conditions throughout the permit that refer to underlying applicable requirements that were established in a construction permit are designated as "(T1)." However, these conditions do not state the specific construction permit under which requirements were established. The permit should specify the construction permit that established these requirements. The permit should also clarify if

120 See Conditions 7.1.6(b), 7.3.2-2, 7.3.3-1, 7.3.5(a), (e) and (f), 7.3.6, 7.7.3-1, 7.7.5, 7.7.6, 7.7.8, 7.8.3, 7.8.5, 7.8.6, 7.8.7, 7.8.8, 7.8.9, 7.9.6, 7.10.3, 7.12.3, 7.12.6, 7.12.7, 7.12.8 and 7.12.9.
those requirements are Best Available Control Technology (BACT) requirements established under the authority of the rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21. As required by 40 CFR 70.6(a)(1)(i) and Section 39.5(7)(n) of the Act, the revised CAAPP permit must specify and reference the origin of and authority for each term and condition.

Response:
Sections 7.3, 7.7, 7.8, 7.10 and 7.12 of the CAAPP permit are all related to the Dallman 4 Project, which was addressed by Construction Permit/PSD Approval 04110050. Accordingly, it is not necessary for each of the “T1” and “BACT” requirements contained in these sections of the permit to individually identify this construction permit as the origin and authority for these requirements. Instead, in the introductory “Descriptions” in these sections of the permit (i.e., Conditions 7.3.1, 7.7.1, 7.8.1, 7.10.1 and 7.12.1), Construction Permit/PSD Approval 04110050 has been generally identified as the basis of the T1 requirements in these sections of the permit.\(^ {121}\)

As certain T1 conditions for the Dallman 4 project are BACT requirements, this is also indicated in the permit as those requirement are designated as “[T1] [BACT].” This is explained in Condition 1.5, which generally discusses the use of T1 designations in the permit.

In the other conditions cited by this comment, the relevant construction permits that are the basis of the T1 conditions are identified in notes immediately following the conditions.\(^ {122}\)

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\(^ {121}\) In the issued permit, a typographical error in Condition 7.10.1 was corrected to specify Construction Permit 04110050, rather than Construction Permit 040050.

\(^ {122}\) For Condition 7.1.6(b), Construction Permit 15040039 is identified as the origin in the note following this condition. For Condition 7.9.6(b), Construction Permit 01070019 is identified in the note following this condition.
G. PRESENTATION BY CWLP AT THE PUBLIC HEARING

(The following is the presentation made at the public hearing by CWLP’s Chief Utility Engineer. It is included in this Responsiveness Summary for informational purposes)

I want to go on the record at tonight’s hearing and state that CWLP believes that the draft of the revised CAAPP permit would fairly and fully address compliance with applicable regulations while incorporating terms specific to CWLP’s Dallman plant. In addition, the draft CAAPP permit is just one example of CWLP's commitment to the environment.

CWLP is a vertically integrated non-for-profit municipal utility providing electric power to approximately 68,000 customers, the residents and commercial businesses of Springfield and surrounding areas. The cost for this electric power and our environmental controls are borne by our citizens, the ratepayers. CWLP is one of the few Illinois coal plants still burning Illinois coal, purchasing coal from a local mine employing Illinois miners.

CWLP currently operates four coal generating units. Three of the units were placed into service in 1968, 1972, and 1978, for an electric generating capacity of 352 net megawatts which is comparatively small. CWLP installed scrubbers on these three units for these units as early as 1980 to reduce SO2 emissions by more than 90 percent. CWLP installed selective catalytic reduction systems (SCRs) for NOx removal in 2003. In 2009 the SCRs began year-round operation to assist in control of other emissions. Additionally, these units utilize electrostatic precipitators which capture approximately 99 percent of particulates. Units 31 and 32 are the two smallest in the country with complete air pollution control trains and provide critical reliability and voltage support services to the power system.

In 2009, CWLP began commercial operation of the new generating unit, Dallman Unit 4, which has won accolades from engineering and environmental groups alike. Unit 4 was constructed with a dry ash handling system and has some of the most advanced air pollution controls of any power plant in the country, exceeding the controls on many neighboring investor-owned utilities.

Since 2007 and 2008, CWLP has also purchased electricity from two Iowa wind farms bringing Springfield low carbon, renewable energy supply which provided the equivalent of 23 percent of CWLP’s energy supply in 2015, far greater than Illinois' renewable energy standard.

CWLP's energy services office provides invaluable energy savings such as through the Helping Hands Program which provides 100 percent of the cost of home weatherization and energy efficiency programs to qualifying seniors and low income homeowners within the city which can include the cost of air conditioners, heat pumps or furnaces, insulation, refrigerator replacement, and lighting upgrades following an energy audit.
CWLP has been an important part of Springfield's community for decades now with just under 600 employees. Air pollution projects have been an important source of revenue and work for many local and worldwide contractors, as has our water projects. Lake Springfield serves not only as a cooling lake for our generation, but it is also our drinking water supply source, providing valuable outdoor recreation too. CWLP strives to keep it clean. The revised CAAPP permit is a necessary component of CWLP’s commitment to the environment and to continue efficient operations that comply with applicable regulations.
ATTACHMENT 1:
CHANGES BETWEEN THE DRAFT PERMIT AND THE ISSUED PERMIT

OVERALL SOURCE CONDITIONS

Condition 5.2.2(a)(ii)
New condition 5.2.2(a)(ii) has been included in the issued permit to directly address compliance with 35 IAC 212.301. This state rule prohibits fugitive emissions if they are visible at the property line when looking directly overhead unless the wind speed is more than 25 miles per hour. New Condition 5.2.2(a)(ii) now provides that, upon request by the Illinois EPA, the source must conduct daily observations at the property line for a week to address compliance with 35 IAC 212.301. This requirement addresses the unlikely circumstance that the emissions from the subject operation(s) would be such that compliance with 35 IAC 212.301 might be put into question. This change responded to concerns that the draft permit did not include compliance procedures to address 35 IAC 212.301.

Condition 5.2.7(a)(i)
In this condition, the date of submittal for the Control Measures Record was revised to reflect the date for the most recent submittal. This updated Control Measures Record is now incorporated by reference into the issued CAAPP permit.

Conditions 5.2.7(a)(ii) and (iii)
Revised Condition 5.2.7(a)(ii) and new Condition 5.2.7(a)(iii) address the broader “incorporation by reference” of the Control Measures Record into the CAAPP permit. These conditions now require revisions to the CAAPP permit if the source changes provisions in the Control Measures Record for the following operations: 1) Coal truck unloading; 2) Coal storage piles; and 3) Fly ash load-out. These operations were identified on the basis of their potential for emissions, as they are the only operations addressed by the Control Measures Record whose emissions could, as a practical matter, exceed applicable standards. For such operations, changes to the Control Measures Record affecting the nature, application or frequency of the relevant control measures will not be automatically incorporated into the CAAPP permit but, instead, will require an appropriate revision to the permit. These changes respond to a comment questioning the automatic incorporation of future revisions of the Control Measures Record by the source into the permit.

Note: In the issued permit, Draft Condition 5.2.7(a)(i) has been divided into Conditions 5.2.7(a)(i) and (ii).

Condition 5.2.7(iv)
New Condition 5.2.7(iv) was added to the permit to further address the actions that would follow the submittal of a revised Control Measures Record by the source. This condition now provides that if, within 30 days of receipt of a revised Control Measures Record, the Illinois EPA notifies the Permittee in writing of any deficiency with the revision, then, within 30 days of such notice, the source shall respond with relevant additional information or a further revision to the Control Measures Record. This change also responds to a comment concerning possible revisions to the Control Measures Record.

Condition 5.6(a)
CWLP Dallman Station:
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This condition addresses when new compliance obligations established by the issued permit take effect. Conditions 7.4.8(c) and 7.7.9(c), which now requires visual surveys of the coal storage pile operations, are examples of such obligations. Condition 5.6(a) provides that these new compliance obligations become effective 36 days after the issuance of the revised permit. This is reasonable because the source must revise its practices and procedures to address these new obligations.

**Condition 5.6(b)**

This condition provides 15 more days for the source to submit its first quarterly report pursuant to the issued permit. This is reasonable because the source must assemble and report additional information that this permit now requires to be provided in these reports. More time is only provided for submittal of the first quarterly report pursuant to this permit. Subsequent reports must be submitted within the timeframe in Conditions 7.1.10-2(a)(iii), 7.2.10-2(a)(iii) and 7.3.10-2(a)(iii).

**CONDITIONS FOR CROSS STATE AIR POLLUTION RULE (CSAPR)**

**Section 6.2**

Minor changes to the language in the conditions in Section 6.2 of the permit were made to be consistent with the language in the CAAPP permits issued for other coal-fired utility boilers in Illinois.

**CONDITIONS FOR THE STATE RULE FOR MERCURY EMISSIONS**

**Condition 6.4.1**

In the issued permit, this condition now addresses IAC 225.220(c)(1). In addition to explaining that Section 6.4 of the permit is designated as containing “State-Only Requirements” because it involves requirements that are not part of Illinois SIP, this condition now also explains that 35 IAC 225.220(c)(1) provides that those requirements are to become federally enforceable conditions in CAAPP permits. This corrects an oversight in the draft permit.

In the issued permit, this condition also no longer mentions that continuous monitoring for mercury may be conducted with either continuous emission systems (CEMS) or sorbent trap monitoring systems. This change was made in response to a comment that sought clarity on the type of monitoring conducted by CWLP. While CWLP currently uses sorbent trap systems, the applicable rules allow for use of CEMS. As it is not necessary for this condition to specify the acceptable methods for monitoring, this information is not included in this condition in the issued permit.

**Condition 6.4.4(c)**

This condition was added to the issued permit to clarify that CWLP may demonstrate compliance with the mercury limitations in the state rule based of emissions of multiple EGUs and the source in accordance with the provisions of 35 IAC 225.230(d)(1) and (2).

**Condition 6.4.8(a)(iii)(D)**

This condition in the draft permit was not included in the issued permit. As provided by 35 IAC 225.330(a)(2), CWLP is not required to report mass emissions of mercury in ounces each quarter because it reports mercury emissions in pounds per gigawatt-hour of electrical output, consistent with the applicable standard at 35 IAC 225.230(a).
CONDITIONS FOR MERCURY AND AIR TOXICS STANDARDS (MATS)

Condition 6.5.6(d)
In the issued permit, this condition now reflects the exact language in 40 CFR 63 Subpart UUUUU, the MATS rule, for the recordkeeping that is required for the combustion of non-hazardous secondary materials or fuels. This change responds to comments concerning the provisions of the permit that provide CWLP with operational flexibility for the coal boilers to burn certain alternative solid fuels with coal. The enhanced condition, with language from the MATS rule, provides more clarity and specificity regarding the types of alternative fuels that may be used pursuant to the operational flexibility provided by Conditions 7.1.11-2(a) and 7.2.11-2(a).

Condition 6.5.8(a)
In the issued permit, this condition regarding the requirements of the MATS rules during startup of the coal boilers now indicates that CWLP is complying by means of paragraph (2) of the definition of startup in 40 CFR 63.10042 and not paragraph (1) as indicated in the draft condition. The condition continues to recognize that CWLP may switch between paragraph (1) and (2) of the definition of startup by following appropriate procedures specified in 40 CFR 63.10030(e)(8)(iii)(A) through (K).

COAL FIRED BOILERS

Conditions 7.1.5(a), 7.2.5(b) and 7.3.4(a)
In these conditions, the phrase “coal or other solid fuel” has been replaced with “coal (solid fuel).” In these conditions, which address the possible applicability of different state emission standards to the coal boilers if solid fuel were not their principle fuel, coal is appropriately identified as being a type of solid fuel. This is because the relevant state standards that address emissions from boilers that burn coal do not actually refer to boilers that burn coal. These standards actually refer and apply to boilers that burn “solid fuel.” These changes respond to comments that the changes to this condition that would have been made by the draft permit would allow the boilers to burn solid fuels other than coal. The new wording in the conditions in the issued permit is more consistent with the language of relevant state emission standards. It also better expresses that coal is being addressed in this condition as a type of solid fuel.

Conditions 7.1.5(h), 7.2.5(j) and 7.3.4(c)
As a result of comments regarding use of alternative fuels in the coal boilers, this non-applicability statement was revised to clarify that, at the time this revised permit was issued, the coal-boilers were not subject to 40 CFR 60 Subpart CCCC, the NSPS for Commercial Industrial Solid Waste Incineration (CISWI) Units. This is because these boilers do not serve to combust solid waste, as defined by 40 CFR Part 241.

Draft Conditions 7.1.7(a)(ii)(A) and 7.2.7(a)(iii)(A)
These draft conditions have not been carried over into the issued permit. These conditions addressed initial testing for emissions of PM and CO from the Boilers 31/32 and 33. This testing has now been conducted.

Draft Condition 7.1.7(a)(iii) and 7.2.7(a)(i) and Conditions 7.1.7(b)(i) and 7.2.7(b)(i)
Changes have been made to these conditions that address the load at which Boilers 31/32 and 33 are operated during the required periodic emission
testing to confirm compliance with the state standards for PM emissions. Draft Conditions 7.1.7(a)(iii) and 7.2.7(a)(i) have not been carried over into the issued permit. These conditions would have required further testing of a boiler based on the load at which the boiler is operated compared to the load when it was last tested. Conditions 7.1.7(b)(i) and 7.2.7(b)(i) now specify that this periodic testing must be conducted at “maximum normal operating load conditions,” using terminology in the MATS rule for PM emission testing, 40 CFR 63.1007(a)(2). This will serve to ensure that the required testing of these boilers is conducted at sufficiently high load that the results can be considered representative. Accordingly, Draft Conditions 7.1.7(a)(iii) and 7.2.7(a)(i) were no longer necessary. These changes respond to comments expressing concern that the criteria in Draft Condition 7.1.7(a)(iii) and 7.2.7(a)(i) would have not required that testing be conducted at sufficiently high load to ensure that the results would be representative.

* Related changes were also made to Conditions 7.1.10-2(a)(i)(B) and 7.2.10-2(a)(i)(B) as records are no longer needed for the operation of the boilers in relation to the criteria that were formerly contained in Conditions 7.1.7(a)(iii) and 7.2.7(a)(i).

Condition 7.1.7(a)(iv) and 7.2.7(a)(iv)
Changes were made to these conditions to refine the requirements for the emission testing that would apply if an alternative fuel is used in the Boilers 31/32 or 33. These conditions now provides that if any alternative fuel is used in a boiler and CWLP is demonstrating compliance with a MATS emission standard for a pollutant by periodic emission testing and not by monitoring, emissions testing must be conducted for the boiler to address compliance with that MATS standard when using alternative fuel and coal, as well as when using only coal. In addition, if any alternative fuel is used, emission testing must be conducted to address compliance with the state emission standard for carbon monoxide, 35 IAC 216.121. The changes ensure that if alternative fuel(s) are used in these boilers, CWLP must have emission testing conducted as needed to demonstrate compliance with applicable emission standards. The changes to this condition respond to comments for other coal-fired power plants in Illinois concerning the operational flexibility being provided by the permits for use of alternative fuels with coal.

Condition 7.3.7(a)(iii)
In the issued permit, this condition is now included requiring that performance testing of Boiler 4 be conducted at the maximum normal operating load consistent with what is required for Boilers 31, 32 and 33 in Conditions 7.1.7(b)(i) and 7.2.7(b)(i). This condition was inadvertently omitted in the draft permit.

Conditions 7.1.9(g)(ii)(D)(I), 7.2.9(g)(ii)(D)(I) and 7.3.9(j)(ii)(D)(I)
Since the cause of a malfunction/breakdown was not addressed by the related recordkeeping required in the draft permit, Conditions 7.1.9(g), 7.2.9(g) and 7.3.9(j) were revised. It is appropriate that the cause for a malfunction or breakdown still be addressed in both the records and specified in the reports. The change responds to a comment identifying the need for reporting the cause of a malfunction/breakdown in Conditions 7.1.10-3, 7.2.10-3 and 7.3.10-3. These conditions now require that the records for a subject exceedance or incident include a detailed explanation for the probable cause.
Conditions 7.1.10-2(a)(i)(F) and 7.2.10-2(a)(i)(F)
This new conditions require that the required quarterly reports for Boilers 31/32 and 33, must now include monthly information for the usage of coal and any alternative fuels. This change responds to comments for other coal-fired power plants in Illinois concerning the operational flexibility provided by the permit for use of alternative fuels.

Conditions 7.1.11-1 and 7.2.11-1
These conditions were revised because provisions related to the use of alternative fuels by Boilers 31/32 and 33 have been moved to Condition 7.1.11-2(a) and 7.2.11-2(a). These conditions now only address use of used oil generated at the source in these boilers and not “alternative fuels.” This change was an outgrowth of changes made to respond to comments for other coal-fired power plants in Illinois concerning the operational flexibility provided by the permit for use of alternative fuels with coal. In particular, Condition 7.1.11-1 and 7.2.11-1 now addresses only the categories of operational flexibility that do not require prior notification to the Illinois EPA by the source in accordance with Condition 8.4.2(e). In the issued permit, Draft Conditions 7.1.11(c)(ii) and 7.2.11(c)(ii) were moved to Condition 7.1.11-2(a) and 7.2.11-2(a); Draft Conditions 7.1.11(c)(i) and 7.2.11(c)(i) were moved to Condition 7.1.11-1(c) and 7.2.11-1(c).

Conditions 7.1.11-2 and 7.2.11-2
In the issued permit, requirements that apply for use of alternative fuels in Boilers 31/32 and 33 are now in Condition 7.1.11-2(a) and 7.2.11-2(a). Notification in accordance with Condition 8.4.2(e) is now required for use of alternative fuel in the boilers. The issued permit also includes additional requirements related to the materials that may be used as alternative fuels. The changes address the obligation on the source to demonstrate that 40 CFR 60 Subpart CCCC, the NSPS for CISWI Units, continues to not be applicable if alternative fuel(s) are used in the boilers. The changes also address the obligation on the source to conduct performance testing as needed to show that the boilers continue to comply with applicable emission standards when alternative fuel is used. The refinements to the requirements in these condition that apply to any use of alternative fuel in these boilers respond to comments for other coal-fired power plant in Illinois concerning the operational flexibility provided by the permit for use of alternative fuels.

Attachment 10.4
As reflected in Attachment 10.4 of the issued permit, the time period used by in Compliance Assurance Monitoring (CAM) plans for the coal boilers for the state PM emission standards has been revised. The CAM plans addressed by the issued permit now use a rolling three-hour period instead of a three-hour block average. This change serves to address the boilers on an hour-by-hour basis. This is provided with a rolling three-hour period because a separate determination is made for each hour, based on the average emissions for that hour and the two preceding hours.

MATERIAL HANDLING AND PROCESSING EQUIPMENT

Condition 7.4.4(c) and 7.5.4(d)(ii)
In the issued permit, an incorrect reference to a requirement in 40 CFR 60 Subpart Y was corrected.

Conditions 7.4.4(d) and 7.4.5(a)
To address comment on similar conditions in CAAPP permits for other coal-fired power plants in Illinois, Condition 7.4.5(a) was revised in the issued permit. This condition now indicates that coal storage piles are the only coal handling operations that are exempt from the standard for PM emissions pursuant to process weight rule, 35 IAC 212.322. As a consequence of this change, new Condition 7.4.4(d) was added in the issued permit as existing coal transfer, storage bunkers and unloading are subject to this rule. Additionally, requirements for recordkeeping to address compliance with this rule were added as Condition 7.4.9(b)(ii).

Minor changes were also made to Attachments 10.1 and 10.2, which reiterate the tables that accompany the process weight rate rules for consistency with the actual text of these rules.

**Conditions 7.4.6(a)(i) & (ii), 7.5.6(a)(i) & (ii) and 7.6.6(a)(i) & (ii)**  
In these conditions, the term “established” control measures is not used. Instead, these conditions use language related to control measures that is consistent with the language in CAAPP permits issued for other coal-fired power plants in Illinois.

**Conditions 7.4.8(b) and 7.6.8(b)**  
The language in these conditions was revised to be consistent with the language used in comparable conditions in CAAPP permits issued for other coal-fired power plants in Illinois. Condition 7.5.8(b) is included in the issued permit and was not removed, as was proposed in the draft permit.

**Condition 7.5.8(b)**  
Condition 7.5.8(b) is included in the issued permit and was not removed as was proposed in the draft permit. In addition, the language in this ese condition was revised to be consistent with the language in Conditions 7.4.8(b) and 7.6.8(b) and used in comparable conditions in CAAPP permits issued for other coal-fired power plants in Illinois.

**Condition 7.4.8(c) and 7.7.9(c)**  
These conditions now include an additional Periodic Monitoring requirement for the coal storage pile operations. Surveys for the coal piles are now required to be conducted twice a month during warmer weather to address the potential for higher emissions. Monthly surveys are required at other times of the year. The survey is an observation of the coal pile operations for visible emissions in accordance with Method 22 for the duration of at least 10 minutes and/or Method 9 for the duration of at least 6 minutes. During warmer weather, May through November of each year, water evaporates more quickly and the exposed coal at the surface of a pile has increased potential for emissions. This change responded to concerns that the draft permit did not include compliance procedures to address 35 IAC 212.301.

**Condition 7.4.9(b)(i) & (iii), 7.4.9(d) & (e), 7.5.9(a)(ii), 7.5.9(b), 7.5.9(c), 7.6.9(a)(ii), 7.6.9(b) and 7.6.9(c)**  
In the issued permit, these conditions do not use the term “established” control measures. They instead use language that is consistent with comparable conditions in CAAPP permits issued for other coal-fired power plants in Illinois.

Additionally, conditions were added that require any future revisions to the Control Measures Record to specify the section of the permit in which each operation addressed by this record is addressed in the permit. This will
require that any future revisions to the Control Measures Record continue to include this information, which provides a useful link between the Control Measures Record and the permit.

**Draft Conditions 7.5.9(b)(iii), 7.6.9(b)(iii) and 7.7.10(b)(ii)**
These draft conditions were not carried over into the issued permit. This is because CWLP has submitted a revised Control Measures Record that addresses these operations associated with the Dallman 4 project. This revised Control Measures Record has been incorporated by reference into the issued permit.

**Condition 7.6.4(b)**
In the issued permit, this condition was re-worded to use language similar to that in Conditions 7.4.4(b) and 7.5.4(b).

**Condition 7.7.1**
In the issued permit, this condition clarifies that Construction Permit 04110050 is the origin of conditions throughout Section 7.7 of the permit that are designated as “T1” conditions.

**Condition 7.7.5(a)(ii)**
In the issued permit, a cross-reference to Condition 5.2.7(a) was added to specify that the Control Measures Record is incorporated by reference into the permit. This requirement was inadvertently omitted in the draft permit.

**Condition 7.7.7(a)**
In the issued permit, this condition now includes identifies the origin and authority for this condition.

**Condition 7.7.10(b)(i)**
In the issued permit, this condition uses language that is consistent with the language in other sections of the permit that address material handling operations and in CAAPP permits issued to other coal-fired power plants in Illinois.

Additionally, a condition was added that requires any future revisions to the Control Measures Record to specify the section of the permit in which each operation addressed by this record is addressed in the permit. This will require that any future revisions to the Control Measures Record continue to include this information, which provides a useful link between the Control Measures Record and the permit.

**EMERGENCY ENGINES**

**Condition 7.9.5(e)**
In the issued permit, this condition now indicates that the emergency engines are not subject to the initial notification requirements in 40 CFR 63 Subpart ZZZZ, as provided for by 40 CFR 63.6590(b)(3)(ii). The draft permit indicated that initial notifications were required. This condition also now indicates that the affected engines must continue to be operated in accordance with Condition 7.9.6(a) as to qualify as emergency engines.

**Condition 7.9.6(a)**
In the issued permit, this condition now specifies the provisions in 40 CFR 63 Subpart ZZZZ, the NESHAP for Stationary Reciprocating Engines, that the affected engines must meet to qualify as emergency engines.

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**Condition 7.9.10-2**

In the issued permit, this condition now includes the origin and authority for this condition.

In addition, a correction has been made to the wording of this condition as CWLP may provide information in the notification that is required to show that circumstances similar to those that led to high NOx emissions in a year should not be expected in subsequent years. In the issued permit, this condition now provides that such information is to address the circumstances that are expected in “subsequent years,” not the current year.

**Condition 7.9.12(c)**

In the draft permit, this condition indicated that compliance with the requirement in Conditions 7.9.4(c) and 7.9.6 is addressed by, among other things, the opacity testing required by Condition 7.9.7. However, since Condition 7.9.4(c) and 7.9.6 do not include limits for opacity, Condition 7.9.12 in the issued permit does not refer to Condition 7.9.7.

**GENERAL PERMIT CONDITIONS**

**Condition 8.6.3(f)**

A change has been made in Condition 8.6.3(f), which addresses certain data that must be included in reports submitted to the Illinois EPA for required emission testing. In the issued permit, this condition has been reworded to make clear that both raw data and sample calculations must be provided for the various tests and analyses that are entailed in the testing of the emissions of emission units. With the new wording, this condition cannot be read to suggest that reports for emission testing must include either raw data or sample calculations, but not necessarily both. This change was made in response to a comment that observed that such a reading was possible for the condition as worded in the draft permit.