KCBX TERMINALS COMPANY

August 7, 2009

By Electronic Mail and Overnight Mail

Edwin C. Bakowski, P.E. Manager, Permit Section **Division of Air Pollution Control** Illinois Environmental Protection Agency - Bureau of Air 1021 North Grand Avenue East P.O. Box 19506 Springfield, Illinois 62794-9506

Preliminary Draft Federally Enforceable State Operating Permit Re:

I.D. Number: 031600AHI Application Number: 95050167

Dear Mr. Bakowski,

This letter is sent on behalf of KCBX Terminals Co. ("KCBX") in response to your correspondence dated June 24, 2009. By that correspondence, you forwarded us an informal draft ("Draft Permit") Federally Enforceable State Operating Permit ("FESOP") for the KCBX facility located at 3259 E. 100th Street, Chicago, Illinois 60617 ("Facility"). KCBX appreciates the opportunity to review this Draft Permit, and also appreciates the Illinois Environmental Protection Agency ("Illinois EPA" or "Agency") speaking with us on July 23, 2009 regarding the Draft Permit language, and extending the timeframe for KCBX to provide a written response regarding the Draft Permit to August 7, 2009.

As you know, KCBX currently operates the Facility under a FESOP issued by Illinois EPA on April 8, 2004 (Expiration Date: June 22, 2005, Application No: 95050167). KCBX submitted its timely application for renewal of that FESOP on January 27, 2005, and has provided supplemental written information in support of its renewal application since that date. Most recently on January 19, 2009, KCBX transmitted proposed permit language to Illinois EPA. KCBX incorporates its January 27, 2005 renewal application and subsequent written communications relating to the FESOP renewal into this letter by reference.

During our July 23, 2009 telephone conference, KCBX and Illinois EPA discussed four main issues relating to the Draft Permit. KCBX addresses those discussions below, and per our discussion during the telephone conference -- raises additional substantive comments and questions on the Draft Permit language for the Agency's consideration. KCBX has included with this letter a markup of the Draft Permit proposing language

	EXHIBIT	
_/	1<-10	7
		_

3259 East 100th Street • Chicago, Illinois 60617 • 773/375-3700 • FAX 773/375-3153

changes that address all of these issues, as well as other documents that are referenced below. The enclosed markup also includes self-explanatory proposed changes to correct typographical errors in references to regulatory provisions, numbering of permit conditions, etc.

As you will see from the following, in response to our discussion with Illinois EPA on July 23, KCBX proposes to modify the permit conditions addressing emissions of particulate matter ("PM"), and we would like the opportunity to walk through with the Agency our revised proposal. In addition, as indicated by proposed changes in the enclosed draft markup, it appears to us that the Agency may be utilizing information regarding the facility's VOM and SO₂ emissions which is not current, which we also would like to discuss with the Agency. We will contact you in the near future to arrange a telephone conference, and look forward to speaking with you.

Issues Discussed during July 23, 2009, Telephone Conference

Permit Reference to Applicability of NSPS Subpart Y – Proposed Condition 3 in KCBX's January 19, 2009, draft permit language referenced the applicability of the federal New Source Performance Standard ("NSPS") for coal preparation plants, 40 CFR 60, Subpart Y, to a portion of the operations at the Facility which involve screening of coal. (See also further discussion of Subpart Y applicability below.) This proposed language was not included in the Agency's Draft Permit. Based on our July 23, 2009 conversation, KCBX understands that the Agency agrees this language should be included in the permit. Therefore, KCBX has included Subpart Y applicability language in the enclosed markup of the Agency's Draft Permit. KCBX also has struck the Agency's proposed Condition 5 regarding the issuance of a construction permit by the Agency for two conveyors that are not subject to NSPS Subpart Y, as this language does not appear relevant to the FESOP, and does not appear necessary in light of the re-inclusion of KCBX's proposed Condition 3 language.

Limit for Emissions of Particulate Matter ("PM") – Various Conditions of the Agency's Draft Permit reference an emissions limit of 95 tons per year ("tpy") for PM, in addition to a separate limit of 95 tpy for PM less than or equal to 10 micrometers in aerodynamic diameter ("PM₁₀"). See, e.g., Draft Permit Section 10a; Draft Permit Attachment A. Based on our July 23, 2009 conversation, KCBX understands that Illinois EPA included this separate 95 ton PM limit only for purposes of establishing the permit fee for the Facility, and not to establish a synthetic limit on PM emissions for purposes of Title V applicability. This is consistent with U.S. Environmental Protection Agency ("USEPA") guidance which makes clear that "[t]he Federal minimum for applicability of Title V to sources of particulate matter should be based on the amount of emissions of <u>PM-10, not</u> <u>particulate matter</u>, that the source has the potential to emit." October 16, 1995 Memorandum from Lydia N. Wegman, USEPA, enclosed, at 1. (Emphasis added.) Accord, *id.*, at enclosure "Regulated Air Pollutant: Particulate Matter," p. 1 ("[U]nder the Title V operating permits program only PM-10 is considered by EPA to be the regulated form of particulate matter for applicability and fee purposes.") Notwithstanding that a synthetic limit on PM is not necessary for Title V purposes, KCBX requests a synthetic limit to control potential PM emissions for purposes of the Federal Prevention of Significant Deterioration ("PSD") program, 40 CFR 52.21. As the Agency is aware, the Facility does not have any operations within the source categories listed in 40 CFR 52.21(b)(1)(i)(a) (defining "Major stationary source" for purposes of the PSD rule to include, in part, sources of air pollutants in certain categories, such as "portland cement plants, primary zinc smelters," etc.). Thus, the Facility could only be a Major Stationary Source of PM emissions for PSD purposes if relevant emissions of PM exceeded 250 tpy. See 40 CFR 52.21(b)(1)(i)(b).

For purposes of the PSD program, the relevant emissions of PM only include PM emissions from the Facility's coal screening operation. This is made clear by guidance issued by USEPA on March 6, 2003, by Letter from Cheryl L. Newton, USEPA, to the Indiana Department of Environmental Management, a copy of which is enclosed. By this guidance, USEPA "clarify[s] to what extent, and from which emission units, ... fugitive emissions [are] counted towards major source applicability for Title V, nonattainment new source review (NSR), and prevention of significant deterioration (PSD)." *Id.* at 1.

First, USEPA finds that: "If the <u>primary activity</u> of a stationary source falls within a listed source category, then fugitive emissions are included from all emissions units at the source" for purposes of determining applicability with regard to these programs. *Id.* at "Analysis," p. 2. (Emphasis added.) In contrast, however, USEPA further finds that:

If the primary activity of a stationary source falls within a source category that <u>is not listed</u>, then as a general matter fugitive emissions from the emissions units at the source are not included in determining whether the source is a major stationary source. However, if the source also contains emission units which *do* fall within a listed source category (or categories), then you include fugitive emissions <u>from these listed emissions units</u> to determine if the source is a major stationary source.

Id. at "Analysis," p. 3. (Emphasis added.)

As an example, USEPA's guidance discusses "[a] coal mine with an onsite coal cleaning plant with a thermal dryer." *Id.* USEPA notes that "[t]he primary activity of the source, in this example, is the mining of coal, and coal mines are not a listed source category," but that "[t]he coal cleaning plant ... does fall within a listed source category." *Id.* In this case, USEPA concludes: "You include fugitive emissions <u>only from the coal cleaning plant</u> to determine if the source is a major stationary source." *Id.* (Emphasis added.)

In the case of the KCBX Chicago Facility, the primary activity of the Facility is unloading, storing, and loading of bulk solids. The Facility also operates a small screening operation that is subject to NSPS Subpart Y when it is used to screen coal. However, the great majority of material at the Facility is either not coal or is coal that is never introduced into the screening operation. That material, which is not screened, arrives at the Facility by train, barge or truck and is either directly transloaded to another mode of transportation,

such as a lake vessel, or is placed in piles on the Facility storage pad. Material from the storage pad is later loaded onto ships, barges, or trucks for transportation elsewhere.

Only the incidental coal screening operation at the Facility falls within a listed source category under PSD, specifically "[a]ny other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the Act." 40 CFR 52.21(b)(1)(iii)(aa). Thus, pursuant to USEPA's March 6, 2003 guidance, only PM emissions associated with the screening operation are relevant "to determine if the source is a major stationary source" of PM emissions for purposes of PSD. Therefore, only PM emissions associated with the coal screening operation (that is, PM emissions from the screening plant when processing coal and directly-connected appurtenances such as conveyors) need be limited to render the Facility a "synthetic minor" stationary source for purposes of PSD. As discussed below, KCBX proposes a 88 tpy limit on PM10 emissions from the Subpart Y regulated coal screening operation to less than 250 tpy, ensuring that the potential PM emissions from the source would be capped below the threshold for a Major Stationary Source under the PSD program. See enclosed calculations.

During the July 23, 2009 telephone conference, we also discussed the issue of permit fees. In 2008, Illinois EPA assessed a permit fee of \$3,500 for the Facility, presumably pursuant to 415 ILCS 5/9.6(b)(3), as the Facility's current FESOP allows the Facility to emit "at least 100 tons per year of any combination of regulated air pollutants." It is KCBX's understanding that PM (as opposed to PM10) is not a "regulated air pollutant" as that term is defined in 415 ILCS 5/39.5(1) and, accordingly, that emissions of PM are not counted for purposes of determining permit fees. Regardless, the Facility's permit fees would not change under this proposal, because even without emissions of PM, the Draft Permit allows the Facility to emit at least 100 tpy of "any combination of regulated air pollutants" (the combination of CO at 92 tpy, NOx at 92 tpy, PM10 at 88 tpy, SO2 at 21.9 tpy, and VOM at 40.1 tpy is greater than 100 tpy").

Weekly vs. Monthly Emission Limits – The Facility's current FESOP sets both yearly and monthly limits on emissions of certain pollutants, with associated recordkeeping requirements. See, e.g., April 8, 2004, FESOP, §§ 10, 11. The Agency's Draft Permit, on the other hand, sets yearly and weekly limits on such emissions. See, e.g., Draft Permit, §§ 10, 14a. As discussed during our July 23, 2009 telephone conference, setting limits on a weekly basis presents operational difficulties for KCBX. The Agency stated that it would be comfortable with monthly rather than weekly limits if the final FESOP contained numeric limits of 92 tpy rather than 95 tpy for pollutants for which the Title V major source threshold is 100 tpy. As discussed further below, KCBX proposes a PM10 limit of 88 tpy from the screening operation at the Facility, accepts the lower 92 tpy limits for other pollutants, and requests that the Agency include such lower limits with corresponding monthly rather than weekly compliance and recordkeeping requirements in the final FESOP. KCBX has proposed language addressing this issue in conditions 9.a., b. and c., and 13.a.ii. and iii. of the enclosed markup of the Draft Permit. Limits on Facility PM10 Emissions – During our July 23, 2009 telephone conference, we also discussed what emissions of PM_{10} at the Facility are relevant for purposes of determining whether the Facility would be considered a "major source" of PM_{10} emissions for purposes of Title V. As we explained to the Agency, this issue arose in our internal discussions in preparation for the telephone conference, and at that time, we had not fully developed our analysis of this issue.

Like the federal Clean Air Act, Section 39.5(c)(ii) of the Illinois Environmental Protection Act provides that "[t]he fugitive emissions of a stationary source shall not be considered in determining whether it is a major stationary source for the purposes of Section 302(j) of the Clean Air Act, unless the source belongs to one of" certain specified "categories of stationary source." 415 ILCS § 5/39.5(c)(ii). The screening operation discussed above constitutes a "stationary source categor[y], which as of August 7, 1980 [was] being regulated by a standard promulgated under Section 111 or 112 of the Clean Air Act," that is, NSPS Subpart Y. Therefore, the screening operation does fit into the category of stationary source identified in 415 ILCS 5/39.5(c)(AA). No other operation at the Facility fits in to any source category listed in Section 39.5(c).

As with the PSD analysis discussed above, USEPA has made clear that for Title V applicability purposes, where "the primary activity of a stationary source falls within a source category that <u>is not listed</u>, [but] the source also contains emission units which *do* fall within a listed source category (or categories), then you include fugitive emissions from these listed emissions units to determine if the source is a major stationary source." March 6, 2003 USEPA Guidance, "Analysis," at 3. Thus, as with the PSD program, only PM10 emissions associated with the screening operations are relevant for determining Title V applicability, and only PM10 emissions associated with the screening operations need be limited for purposes of avoiding Title V applicability. Therefore, KCBX proposes a 88 tpy limit on PM10 emissions from the screening operations. This limit will serve to cap PM-10 emissions under both the Title V and PSD thresholds, to ensure that the potential PM-10 emissions from the Facility are capped below the threshold for a major stationary source under both programs.

Related to the issue of the limits on emissions of PM and PM10 at the Facility is the question of how the facility monitors the level of moisture in the bulk products at the Facility. In order to ensure the most accurate moisture information for all material that it screens, KCBX proposes to sample this material directly, on a weekly basis, rather than rely on moisture information from suppliers. *See* Proposed Condition 8a. in the enclosed markup of the Agency's Draft Permit. With regard to the moisture of other bulk materials at the Facility, KCBX proposes to rely on moisture information from suppliers or on moisture testing of the material once it is present at the Facility. *See* KCBX's proposed Condition 8b.

Finally, of course, while limits on emissions of PM and PM_{10} from locations or activities at the Facility not associated with the coal screening operation are not necessary under Title V or PSD, such emissions will be subject to state opacity rules and the Facility's Fugitive Particulate Operating Program.

Additional Substantive Comments/Clarifications/Additions

In addition to the changes discussed above, KCBX proposes further substantive changes to the FESOP, as explained in more detail below. All references below to "Draft Permit Condition #" refer to the draft permit conditions as numbered in the Draft Permit dated June 24, 2009, without regard to any typographical errors in the numbering of such conditions. The renumbering of some conditions, as reflected in the enclosed markup, is reflected by the additional language "KCBX Renumbered Condition #" where applicable.

Draft Permit Opening Paragraph -- Changes proposed to the opening paragraph of the draft permit are intended to clarify that:

- 1. the Facility handles only bulk solid materials, not bulk liquids (see also proposed revision to Draft Permit Condition 9.a.);
- 2. the two diesel generators at the Facility are slightly different in size; and,
- 3. combustion units other than the two diesel generators are small in size (i.e., less than 600 horsepower) and may individually run on a variety of fuels (e.g., gasoline, diesel or kerosene).

Draft Permit Condition 1.a. – The change proposed to Draft Permit Condition 1.a is intended to clarify that emission caps are only needed for NOx, CO and PM10 for the facility to be a non-major source with respect to Title V.

Draft Permit Condition 1.d. – The change proposed to Draft Permit Condition 1.c is intended to clarify that any operating authority granted by the Construction Permit for Two Conveyors issued on October 17, 2008 (Application No. 07100090), or any other Construction Permit issued to the Facility, is superseded by this new FESOP, and that the two conveyors, if added, will operate under the conditions of this FESOP and not those of the Construction Permit.

Draft Permit Condition 2.b. – The change proposed to Draft Permit Condition 2.b is intended to clarify the applicability of 35 Ill. Admin. Code § 212.123(b) by noting the emission units to which the condition applies as previously agreed during issuance of the Construction Permit for Two Conveyors on October 17, 2008 (Application No. 07100090).

Draft Permit Condition 2.c. – The change to Draft Permit Condition 2.c is proposed to make the language of the Condition consistent with the Illinois Pollution Control Board ("Illinois PCB") regulation that the Agency is quoting, 35 Ill. Admin. Code § 212.301.

١.

Draft Permit Conditions 2.d through 2.f. – Deletion of Draft Permit Conditions 2.d, e, and f is proposed because no individual storage pile at the facility has the potential to emit 50 tpy of PM as is needed for these Conditions to be applicable.¹

Draft Permit Conditions 2.g and 2.l. – Deletion of Draft Permit Conditions 2.g and 2.l. is proposed because the facility does not have pollution control equipment that collects materials. The addition of such equipment would require a construction permit that would govern the operation of such equipment until such time as the FESOP would be amended or renewed. Therefore, inclusion of these Conditions in the FESOP at this time is not necessary.

Draft Permit Condition 2.h./KCBX Renumbered Condition 2.d. – Changes proposed to Draft Permit Condition 2.h are intended to:

- 1. make the language of the Condition consistent with the Illinois PCB regulation that the Agency is quoting, 35 Ill. Admin. Code § 212.308, even though the facility does not have bagging operations; and,
- remove sub-Conditions i. and ii. relating to conveyor loadout sleeves for loading trucks and railcars, as Section 212.308 specifies that it applies to "fine product truck and railcar loading operations," and the Facility does not segregate materials

¹ <u>See</u> 35 IAC 212.304 and Illinois EPA approved calculations for emissions from storage piles using Fifth Edition AP-42 Chapter 11.9 "Western Surface Coal Mining," Table 11.9-1 for active storage piles and Table 11.9-4 for inactive, exposed areas) Using the equation for inactive storage piles of:

PM Emission = 0.38 ton per acre per year

and assuming the entire 53.26 acre site is one large storage pile and no emission controls such as watering are applied, the potential emissions from this hypothetical inactive pile would be:

PM Emissions = 53.26 acres * 0.38 ton/acre-year = 20.239 tons PM/year

Using the Equation for active piles of:

PM Emission = 3.1536*u = ton per acre per year

Where u is the long-term average annual wind speed of 10.4 miles per hour and assuming the 26.5 acre storage pad is one large storage pile where 10% can be actively worked on any day, and 50% control is achieved from adding water, the potential emissions from this hypothetical pile would be:

PM Emission = 3.1536*10.4 * 26.5 * 0.1 * 0.5 = 43.457 ton per acre per year

The above illustrations are hypothetical because the site actually consists of a minimum of 10 (and more likely 15 to 20) separate storage piles and the Agency has previously agreed that 75 percent control from watering is acceptable for emissions calculations. Additionally, the 26.5 acre storage pad is not wholly consumed by storage piles because space is occupied by roadways, railroad tracks and conveying systems.

to produce a "fine product," and therefore does not engage in "fine product truck and railcar loading operations."

Draft Permit Condition 2.i./KCBX Renumbered Condition 2.e. – The change to Draft Permit Condition 2.i is proposed to make the language of the Condition consistent with the Illinois PCB regulation that the Agency is quoting, 35 Ill. Admin. Code § 212.309(a).

Draft Permit Conditions 2.m., 2.n., and 2.o./KCBX Renumbered Conditions 2.h., 2.i., and 2.j. – No changes are proposed to Draft Permit Conditions 2.m, 2.n, and 2.o, but KCBX notes that 35 III. Admin. Code 212.316(a), 212.302(b) and 212.324(a)(1)(B) also require conformance to these permit Conditions.

Second Draft Permit Condition 2.n. (Draft Permit Page 5)/KCBX Renumbered Condition 2.o. – The revision of the second Draft Permit Condition numbered "2.n." (Draft Permit Page 5) is proposed because all "process emission units" at the Facility, defined in 35 Ill. Admin. Code 211.5190 as non-fuel combusting emission units only, have only fugitive emissions which are exempted from regulation under 35 Ill. Admin. Code 212.324 by 35 Ill. Admin. Code 212.324(d).

Draft Permit Condition 4.b. – The deletion of Draft Permit Condition 4.b is proposed because the facility does not have process emission sources, as that term is defined in 35 Ill. Admin. Code 211.5190, that emit sulfur dioxide.

Proposed New Condition 3.b. – The addition of a new Condition 3.b is proposed because the Facility believes it may have comfort-heating emission sources that qualify as existing fuel combustion emission sources.

Draft Permit Condition 4.c./KCBX Renumbered Condition 3.c. – The change proposed to Draft Permit Condition 4.c makes this Condition consistent with the proposed addition of new Condition 3.b to the extent that "existing" equipment is or is not defined. KCBX has furnaces / water heaters that predate the acquisition of the Facility in 1993.

KCBX further notes that it is unsure how to interpret Draft Permit Condition 4.c., which quotes Illinois PCB regulation 35 Ill. Admin. Code § 214.304, because Section 214.304 refers to "burning of fuel at process emission sources." However, by definition, fuel is not burned in "process emission sources" -- "process emission source" is defined as "any stationary emission source <u>other than a fuel combustion emission unit</u> or an incinerator." 35 Ill. Admin. Code § 211.5185. Accord, 35 Ill. Admin. Code § 211.5190 (defining "process emission unit"). KCBX would appreciate guidance from the Agency on this issue.

Draft Permit Condition 8.e./KCBX Renumbered Condition 7.e. – The change to Draft Permit Condition 8.e. is proposed to make the language of the Condition consistent with the regulation that the Agency is quoting, 35 Ill. Admin. Code § 212.704(b). **Draft Permit Condition 8.f.** – The deletion of Draft Permit Condition 8.f is proposed because the regulation quoted in this draft Condition, 35 Ill. Admin. Code Section 212.704(e), addresses actions required of the Agency, not permit holders, and thus its inclusion in the FESOP is unnecessary.

Draft Permit Condition 9.b.ii/KCBX Renumbered Condition 8.a. — The changes to this Draft Permit Condition are proposed to clarify that the purpose of the 1.5% moisture content for coal to be processed through the coal preparation plant is to designate that the emission factor for controlled emissions may be used in the calculation of particulate emissions. The proposed changes also set out the conditions whereby water must be applied in order to utilize the emission factor for controlled emission factor for controlled emission factor for controlled emission factor for controlled emissions.

Proposed Draft Permit Condition 8.b. – Draft Permit Condition 8.b is proposed to establish the source of moisture data for other particulate emissions calculations.

Draft Permit Condition 9.e. – The deletion of Draft Permit Condition 9.e is proposed because KCBX believes this Condition is unnecessary in light of the proposed revisions to Draft Permit Conditions 4.a., b. and c. discussed above.

Draft Permit Condition 10.a./KCBX Renumbered Condition 9.a. – As discussed in more detail above, KCBX proposes revisions to Draft Permit Condition 10.a. intended to limit certain emissions for PM_{10} to 88 tpy, with a corresponding change from weekly to monthly emissions limits. KCBX proposes additional revisions to this Draft Permit Condition to clarify that the PM10 limit is based on the combination of capacity of the screening equipment taken together with the number of material transfers these materials' pass through.

;

Draft Permit Condition 10.b./KCBX Renumbered Condition 9.c. – As discussed in more detail above, KCBX proposes revisions to Draft Permit Condition 10.b. intended to lower the draft limits on emissions for CO and NOx to 92 tpy, SO2 to 21.9 tpy, and VOM to 40.1, with a corresponding change from weekly to monthly emissions limits. Additional changes to Draft Permit Condition 10.b are proposed in order to:

- 1. make the Condition consistent with monthly calculations as described above;
- 2. clarify that the emissions calculations cover all non-mobile fuel combustion emissions not excluded as insignificant sources;
- 3. clarify that emission factors come only from Table 3.4-1 in AP-42 for large diesel engines 600 Hp or greater;
- add the horsepower to the calculation formula because the two generators are of different horsepower;
- change the emission factor for VOM to the value stated in the cited reference Table 3.4-1 in AP-42; and

6. add emission calculations for small (< 600 Hp) combustion units.

KCBX notes that the Agency did not include calculations for emissions of CO, NO_x , SO_2 , and VOM from the other, small gasoline, kerosene and diesel combustion units at the Facility. KCBX has included calculated emissions from all combustion units, regardless of size or function, but understands that the Agency may have determined the emissions from some or all of these units to be insignificant.

Proposed New Condition 12.b.ii.D. – New Condition 12.b.ii.D. is proposed to reflect the rule requirement of 35 Ill. Admin. Code § 212.316(g)(2)(D).

Second Draft Permit Condition 14.a.i. (Draft Permit Page 14/)/KCBX Renumbered Condition 13.a.iv.. – The changes to the second Draft Permit Condition numbered "14.a.i" (Draft Permit Page 14) are proposed to:

- 1. distinguish "processing" from "handling" (i.e., transferring a material from one location at the Facility to another location is not processing the material);
- 2. maintain consistency of naming;
- 3. change the recording frequency from weekly to monthly, consistent with the comments above.

Draft Permit Condition 14/KCBX Renumbered Condition 13. – The changes to Draft Permit Condition 14 are proposed to be consistent with the moisture data required in Renumbered Condition 8 and to change the recording frequency from weekly to monthly, consistent with the comments above.

Draft Permit Condition 14.c./KCBX Renumbered Condition 13.c. – The change to Draft Permit Condition 14.c., which as drafted requires retention of all records for a period of five years, is proposed to make this Condition consistent with Draft Permit Conditions 13.b.iii and 13.c.iv, which require retention of certain specified records for only three years.

Additional Permit Conditions Needed. -- KCBX continues to believe the following regulations are applicable to the Facility, and requests the Agency address these regulations in the FESOP:

- 1. 35 Ill. Admin. Code § 212.107
- 2. 35 Ill. Admin. Code § 212.109
- 3. 35 Ill. Admin. Code § 212.206
- 4. 35 Ill. Admin. Code § 212.315
- 5. 35 Ill. Admin. Code § 212.316(g)(3)
- 6. 35 Ill. Admin. Code § 212.323
- 7. 35 Ill. Admin. Code § 212.324(g)(4)

35 Ill. Admin. Code § 212.701(c)
 35 Ill. Admin. Code § 212.701(d)
 35 Ill. Admin. Code § 212.704(c)
 35 Ill. Admin. Code § 214.161

KCBX proposed permit conditions addressing these regulations in its draft FESOP language forwarded to the Agency on January 19, 2009.

Typographical Errors

Finally, KCBX's enclosed markup of the Draft Permit includes proposed changes to correct typographical errors, e.g., in references to regulatory provisions, numbering of permit conditions, etc. that are self explanatory

Again, KCBX appreciates the opportunity to communicate with Illinois EPA regarding the Draft Permit, both during our July 23 telephone conference, and through this correspondence. We hope the Agency finds this correspondence useful. If the Agency has any questions - regarding this correspondence, or any other aspect of the Facility or the Draft Permit – please do not hesitate to contact Terry Steinert, Environmental Compliance Manger, Koch Minerals, LLC, at 316-828-7847.

Thank You,

Tim Simmons

Terminal Manmager

Page 1

xxx/xxx-xxxx

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT

PERMITTEE

KCBX Terminals Co. Attn: Chris Bailey 3259 East 100th Street Chicago, Illinois 60617

Application No.: 95050167I.D. No.: 031600AHIApplicant's Designation: REV10/07Date Received: January 31, 2005Subject: Bulk Solid Materials TerminalDate Issued: DRAFT 07-02-2009Location: 3259 East 100th Street, Chicago, Cook County, 60617

This permit is hereby granted to the above-designated Permittee to OPERATE emission sources(s) and/or air pollution control equipment consisting of a bulk <u>solid</u> materials <u>trans-shipment</u> terminal, <u>one (1) coal preparation</u> (screening) plant, <u>one (1) 425 kW (750 Hp)</u> diesel generator, <u>one (1) 450 kW</u> (760 Hp) diesel generator, and <u>miscellaneous</u> small (less than 600 Hp) gasoline, kerosene and diesel fuel combustion units pursuant to the abovereferenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

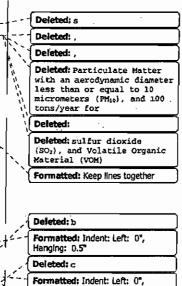
1a. This federally enforceable state operating permit is issued to limit the emissions of air pollutants from the source to less than the Clean <u>Air Act Title V</u> major source threshold (i.e., 100 tons/year for Carbon Monoxide (CO) and Nitrogen Oxides (NOX).) In addition, this federally enforceable state operating permit is issued to limit the emissions of <u>Particulate Matter (PM) with an aerodynamic diameter less than or equal</u> to 10 micrometers (PM₁₀) from the coal preparation plant, while this plant is processing coal, to less than the Title V major source threshold. As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit are described in Attachment A.

b. This federally enforceable state operating permit also is issued to limit the emissions of PM from the source to less than the major stationary source threshold for the Federal Prevention of Significant Deterioration program (i.e., 250 tons/year from the coal preparation plant, while this plant is processing coal). As a result, the source is excluded from the requirements of the PSD program set forth in 40 C.F.R 52.21.

<u>c</u>. Prior to issuance, a draft of this permit has undergone a public notice + and comment period.

d. This permit supersedes all operating permit(s) and operating authority ... granted in construction permits for this location.

Deleted: two	(2)	560 Hp	
Deleted: s			
Deleted: ,			



Hanging: 0.5"

Deleted: and construction

Page 2

- 2a. Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.
- b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit (i.e., any emission unit other than a fuel combustion emission unit greater of 600 <u>Hp or larger</u>) may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 feet) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.
- c. Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.
- <u>4</u>. Pursuant to 35 III. Adm. Code 212.308, crushers, grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, <u>bagging operations</u>, storage bins and fine product truck and railcar loading operations shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with an operating program.
- E. Pursuant to 35 III. Adm. Code 212.309(a), the emission units described in III. Adm, Code 212.304 through 212.308 and 212.316 shall be operated under the provisions of an operating program, consistent with the requirements set forth in III Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the Agency for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.
- f. Pursuant to 35 III. Adm. Code 212.310, as a minimum the operating program shall include the following:
 - i. The name and address of the source;
 - The name and address of the owner or operator responsible for execution of the operating program;
 - iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;
 - iv. Location of unloading and transporting operations with pollution control equipment;

Deleted: emission

Deleted: d. . Pursuant to 35 III. Adm. Code 212.304(a), all storage piles of materials with uncontrolled emissions of fugitive particulate matter in excess of 50 T/yr shall be protected by a covar or sprayed with a surfactant solution or water on a regular basis, as needed, or treated by an equivalent method, in accordance with the operating program required by Sections 212.309, 212.310 and 212.312 of, this Subpart.¶

e..Pursuant to 35 Ill. Adm. Code 212.305, all conveyor loading operations to storage piles specified in 35 Ill. Adm. Code 212.304 shall utilize spray systems, telescopic chutes, stone ladders or other equivalent methods in accordance with the operating program required by Sections 212.309, 212.310 and 212.312.§

f. Pursuant to 35 Ill. Adm. Code 212.306, all normal traffic pattern access areas specified in 35 Ill. Adm. Code 212.304 shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by 35 Ill. Adm[...[1]

Deleted: h Deleted: h Deleted: i. .Conveyor loadout to trucks and railcars shall be conducted with sleeves extending to at least 6 inches below the sides and the receiving vehicle, except for topping offg i...Conveyor loadout sl....[2] Formatted: Keep lines together Deleted: i Deleted: j

Page	3	• •	
	. v.	A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212 Subpart K, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;	
	vi.	Estimated frequency of application of dust suppressants by location of materials; and	·
	vii.	Such other information as may be necessary to facilitate the Agency's review of the operating program	
a.,	Pursu	ant to 35 Ill. Adm. Code 212.312, the operating program shall be	Deleted: k
	amend	ed from time to time by the owner or operator so that the	<u> </u>
		ting program is current. Such amendments shall be consistent with	Formatted: Keep lines together
		l. Adm. Code 212 Subpart K and shall be submitted to the Agency ts review.	
<u>h</u>	Pursu allow or sc	ant to 35 Ill. Adm. Code 212.316(b), no person shall cause or fugitive particulate matter emissions generated by the crushing reening of slag, stone, coke or coal to exceed an opacity of 10	Deleted: g 1. Pursuant to 35 Ill. Adm. Code 212.313, if particulate collection equipment is operated pursuant to 35 Ill.
<u>i.</u>	allow area not e: millio Parsus	ant to 35 Ill. Adm. Code 212.316(c), no person shall cause or fugitive particulate matter emissions from any roadway or parking to exceed an opacity of 10 percent, except that the opacity shall kceed 5 percent at quarries with a capacity to produce more than 1	Adm. Code 212.304 through 212.316 and 212.312 (i.s., to control bucket elevators, conveyor transfer points, conveyors, storage bins and fine product truck and radicar loading operations,), emissions from such equipment shall not exceed 68 mg/dscm (0.03 gr/dscf).f
		fugitive particulate matter emissions from any storage pile to	Defeted: m
	surfac		Formatted: Keep lines together
			Deleted: n
<u>k</u>		ant to 35 Ill. Adm. Code 212.316(f), unless an emission unit has	Deleted: 0
		assigned a particulate matter, PM ₁₀ , or fugitive particulate matter	<u> </u>
	Ill.) fugit:	Adm. Code 212 Subparts R or S, no person shall cause or allow ive particulate matter emissions from any emission unit to exceed acity of 20 percent.	Deleted: p
		•+	Formatted: Keep lines together
<u>1</u>	allow	ant to 35 Ill. Adm. Code 212.321(a), no person shall cause or the emission of particulate matter into the atmosphere in any one	Deleted: q
		period from any new process emission unit which, either alone or	
		mbination with the emission of particulate matter from all other ar process emission units for which construction or modification	
		ar process emission units for which construction or modification aced on or after April 14, 1972, at a source or premises, exceeds	
		llowable emission rates specified in 35 Ill. Adm. Code 212.321(c).	

<u>m</u>. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated **Deleted**, r values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined by using the equation:

 $E = A(P)^{B}$

į

Deleted: s

Deleted: m

Deleted: t

Deleted: n

Deleted:)

Deleted: 4

প্ৰ

micrometers (

Formatted: Subscript

Deleted: shall. not

New, 10 pt, Not Bold

Formatted: Keep lines together

Deleted: particulate matter

Formatted: Font: (Default) Courier

Formatted: Font: (Default) Courier New, 10 pt, Not Bold

Deleted: b. Pursuant to 35

the emission of sulfur

Ill. Adm. Code 214.301, no person shall cuase or allow

dioxide into the atmosphere from any process emission source to excess 2000 ppm.1

with an aerodynamic diameter less than or equal to 10

Page 4

where

P = Process weight rate; and

E = Allowable emission rate; and,

i. Up to process weight rates of 408 MG/hr (450 T/hr):

P	<u>Metric</u> Mg/hr	<u>English</u> T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
в	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
в	0.16	0.16

- n. Pursuant to 35 Ill. Adm. Code 212.700(a), 35 Ill. Adm. Code 212 Subpart U (Additional Control Measures) shall apply to those sources in the areas designated in and subject to 35 Ill. Adm. Code 212.324(a)(1) or 212.423(a) and that have actual annual source-wide emissions of PM₁₀ of at least fifteen (15) tons per year.
- q. Pursuant to 35 Ill. Adm. Code 212.324(b), except as otherwise provided in 35 Ill. Adm. Code 212.324, no person shall cause or allow the emission into the atmosphere of PM₁₀ from any process emission unit to exceed 68.7 mg/scm (0.03 gr/scf) during any one hour period.
- 3a. Pursuant to 35 III. Adm. Code 214.122(b)(2), no person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any new fuel combustion source with actual heat input smaller than, or equal to, 73.2 MW (250 mmbtu/hr), burning liquid fuel exclusively to exceed 0.46 kg of sulfur dioxide per MW-hr of actual heat input when distillate fuel oil is burned (0.3 lbs/mmbtu).
- b. Pursuant to 35 Ill. Adm. Code 214.161, no person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any existing fuel combustion emission source, burning liquid fuel exclusively to exceed 0.46 kg of sulfur dioxide per MW-hr of actual heat input when distillate fuel oil is burned (0.3 lbs/mmbtu).
- c. Pursuant to 35 Ill. Adm. Code 214.304, the emissions from the burning of fuel at process emission sources located in the Chicago or St. Louis (Illinois) major metropolitan areas shall comply with the applicable Subparts B through F (i.e., 35 Ill. Adm. Code 214.122(b) and 214.161).

Page 5

- 4. Pursuant to the federal New Source Performance Standard (NSPS) for coal preparation plants, 40 CFR 60, Subpart A and Y, crushing and screening of coal at the source constitutes coal preparation and crushers, screeners and all conveyors directly connected to these emission units are subject to NSPS for coal preparation plants while processing coal.
- 5a. This permit is issued based on this source not being a participating source in the Emissions Reduction Market System (ERMS), 35 Ill. Adm. Code Part 205, pursuant to 35 Ill. Adm. Code 205.200. This is based on the source's actual VOM emissions during the seasonal allotment period from May 1 through September 30 of each year being less than 10 tons and the source's baseline emissions also being less than 10 tons.
- b. In the event that the source's VOM emissions during the seasonal allotment period equal or exceed 10 tons, the source shall become a participating source in the ERMS and shall comply with 35 Ill. Adm. Code Part 205, by holding allotment trading units (ATUs) for its VOM emissions during each seasonal allotment period, unless the source obtains exemption from the ERMS by operating with seasonal VOM emissions of no more than 15 tons pursuant to a limitation applied for and established in a Clean Air Act Permit Program (CAAPP) permit or a Federally Enforceable State Operating Permit (FESOP).
- c. Fursuant to 35 Ill. Adm. Code 205.316(a), any participating or new participating source shall not operate without a CAAPP permit or FESOP. Fursuant to 35 Ill. Adm. Code 205.316(a) (2), if a participating or new participating source does not have a CAAPP permit containing ERMS provisions and the source elects to obtain a permit other than a CAAPP permit, the source shall apply for and obtain a FESOP that contains, in addition to other necessary provisions, federally enforceable ERMS provisions, including baseline emissions, allotment for each seasonal allotment period, identification of any units deemed to be insignificant activities for purposes of the ERMS, emissions calculation methodologies, and provisions addressing all other applicable requirements of 35 Ill. Adm. Code Part 205.
- 6a. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hour (25 mph). Determination of wind speed for the purposes of this rule shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to this rule is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.
- b. Pursuant to 35 Ill. Adm. Code 212.324(d), the mass emission limits contained in 35 Ill. Adm. Code 212.324(b) shall not apply to those emission units with no visible emissions other than fugitive particulate matter; however, if a stack test is performed, 35 Ill. Adm. Code 212.324(d) is not a defense finding of a violation of the mass emission limits contained in 35 Ill. Adm. Code 212.324(b).

Deleted: 5 Formatted: Keep lines Deleted: This permit: issued based on th electric conveyors. constructed pursua permit 07100090 no subject to the New Performance Standa for Coal Preparati the conveyors will used to convey coa machinery at the c preparation plant. Deleted: 6

Formatted: Keep lines together
Deleted: 7

Page 6

<u>7a.</u> Pursuant to 35 Ill Adm. Code 212.324(f), for any process emission unit + [--subject to 35 Ill. Adm. Code 212.324(a), the owner or operator shall maintain and repair all air pollution control equipment in a manner that assures that the emission limits and standards in 35 Ill. Adm. Code 212.324 shall be met at all times. 35 Ill. Adm. Code 212.324 shall not affect the applicability of 35 Ill. Adm. Code 201.149. Proper maintenance shall include the following minimum requirements:

- i. Visual inspections of air pollution control equipment;
- ii. Maintenance.of an adequate inventory of spare parts; and
- iii. Expeditious repairs, unless the emission unit is shutdown.
- Pursuant to 35 Ill. Adm. Code 212.701(a), those sources subject to 35 ь. Ill. Adm. Code 212 Subpart U shall prepare contingency measure plans reflecting the PM_{10} emission reductions set forth in 35 Ill. Adm. Code 212.703. These plans shall become federally enforceable permit conditions. Such plans shall be submitted to the Illinois EPA by November 15, 1994. Notwithstanding the foregoing, sources that become subject to the provisions of 35 Ill. Adm. Code 212 Subpart U after July 1, 1994, shall submit a contingency measure plan to the Illinois EPA for review and approval within ninety (90) days after the date such source or sources became subject to the provisions of 35 Ill. Adm. Code 212 Subpart U or by November 15, 1994, whichever is later. The Illinois EPA shall notify those sources requiring contingency measure plans, based on the Illinois EPA's current information; however, the Illinois EPA's failure to notify any source of its requirement to submit contingency measure plans shall not be a defense to a violation of 35 Ill. Adm. Code 212 Subpart U and shall not relieve the source of its obligation to timely submit a contingency measure plan.
- c. Pursuant to 35 Ill. Adm. Code 212.703(a), all sources subject to 35 Ill. Adm. Code 212 Subpart U shall submit a contingency measure plan. The contingency measure plan shall contain two levels of control measures:
 - Level I measures are measures that will reduce total actual annual source-wide fugitive emissions of PM₁₀ subject to control under 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 by at least 15%.
 - Level II measures are measures that will reduce total actual annual source-wide fugitive emissions of PM₁₀ subject to control under 35 III. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 by at least 25%.

Formatted: Keep lines together
 Deleted: 8

Page 7

- d. Pursuant to 35 Ill. Adm. Code 212.703(b), a source may comply with 35 Ill. Adm. Code 212 Subpart U through an alternative compliance plan that provides for reductions in emissions equal to the level of reduction of fugitive emissions as required at 35 Ill. Adm. Code 212.703(a) and which has been approved by the Illinois EPA and USEPA as federally enforceable permit conditions. If a source elects to include controls on process emission units, fuel combustion emission units, or other fugitive emissions of PM₁₀ not subject to 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 at the source in its alternative control plan, the plan must include a reasonable schedule for implementation of such controls, not to exceed two (2) years. This implementation schedule is subject to Illinois EPA review and approval.
 - Pursuant to 35 Ill. Adm. Code 212.704(b), if there is a violation of the ambient air quality standard for PM10 as determined in accordance with 40 CFR Part 50, Appendix K, the Illinois EPA shall notify the source or sources the Illinois EPA has identified as likely to be causing or contributing to one or more of the exceedences leading to such violation, and such source or sources shall implement Level I or Level II measures, as determined pursuant to 35 Ill. Adm. Code 212.704 (e). The source or sources so identified shall implement such measures corresponding to any non-fugitive emissions within ninety (90) days after receipt of a notification and shall implement such measures corresponding to any nonfugitive emissions according to the approved schedule set forth in such source's alternative control plan. Any source identified as causing or contributing to a violation of the ambient air quality standard for $\ensuremath{\mathtt{PM}}_{10}$ may appeal any finding of culpability by the Illinois EPA to the Illinois Pollution Control Board pursuant to 35 Ill. Adm. Code 106 Subpart J.
- Ba. The moisture content of coal processed through the coal preparation plant shall be at least 1.5% by weight. The Permittee shall show compliance with this requirement by measuring the moisture content of the coal to be processed at the coal preparation plant using ASTM Procedure D 3302 once each week that coal is processed. If the moisture content of coal to be processed at the coal preparation plant is less than 1.5% by weight, the Permittee shall utilize water sprays on the coal and re-test the moisture content using ASTM Procedure D 3302.
 - 8b. The moisture content of other bulk solid materials handled at the facility shall be recorded from the supplier(s) of the bulk solid materials and used to calculate fugitive PM and PM₁₀ emissions for annual emissions reporting. The facility may utilize water sprays on the material storage and handling operations (e.g., stockpiles and material transfers) to reduce PM and PM₁₀ emissions and to maintain compliance with the applicable visible emissions standards for each affected material handling operation. Following the use of water sprays the Permittee may, but is not required to, re-test the moisture content of bulk solid materials using ASTM Procedure D 3302 for coal and ASTM Procedure D 4931 for petroleum coke. If moisture re-testing is conducted, the results of the re-test will be used in lieu of the analyses from the bulk material supplier.

Deleted: 1 f. Pursuant to 35 Ill. Adm. Code 212.704(e), the Illinois EPA shall require that sources comply with the Level I or Level II measures of their contingency measure plans, pursuant to 35 Ill. Adm. Code 212,704(b), as follows. 1).Level I measures shall be required when the design value of a violation of the 24-hour ambient air quality standard, as computed pursuant to 40 CFR 50, Appendix K, is less than or equal to 170 ug/m(3).9 2) Level II measures shall be required when the design value of a violation of the 24-hour ambient air quality standard, as computed pursuant to 40 CFR 50 Appendix K, exceeds 170 ugr/m(3).g Deleted: bulk materials Formatted: Keep lines together Deleted: handled by the source Deleted: recording Deleted: bulk material received Formatted: Indent: Left: 0.13" Hanging: 0.38", Keep lines together Formatted: Subscript Deleted: source as provided by the supplier of the bulk material. If moisture content falls below 3.0 Deleted: , screening and crushing Deleted: associated with bulk materials having a moisture content below 3.0% by weight Deleted: particulate matter Formatted: Subscript Deleted: ; org ii. Follow the testing [.... [4] Deleted: 9 Deleted: Should three consecutive tests at the source show moisture [... [5] Deleted: 1

Page 8	(
,	Deleted: d
c. The diesel-powered generators shall only be operated with distillate $-t'$	Deleted: e. The Permitte([7]
fuel oil as the fuel. The use of any other fuel in the diesel-powered	· ····································
generators requires that the Permittee first obtain a construction // permit from the Illinois EPA and then perform stack testing to verify //	Formatted[8]
compliance with all applicable requirements.	Deleted: f
	Deleted: e
<u>A</u> . Organic liquid by-products or waste materials shall not be used in any - ⁴ / ₂ / ⁴ emission unit at this source without written approval from the Illinois / ⁴	Deleted: g
EQP.	Deleted: f
η'	Deleted: 10
e. The Illinois EPA shall be allowed to sample all fuels stored at the A A above location.	Deleted: and
	Deleted: operation of al [9]
9a. The PM10 emissions from the processing of coal in	Deleted: the following[10]
the coal preparation plant shall not exceed 8.8 tons per	Deleted: 95
month and 88 tons per year. These limits are based on the maximum throughput of the coal preparation plant per the manufacturer and	Deleted: 2501
standard emission factors (Table 11.19.2-2, AP-42, Volume I, Fifth	Deleted: the maximum am [[12]
Edition, Update August 2004 and Section 13.2.4, AP-42, Volume I Fifth	Deleted: 2004,
Edition, November 2006). PM_{10} emissions shall be calculated and recorded using the equation:	Deleted: and PM
	Formatted [13]
$F_{c} = [(T \times F_{n}) + (S \times F_{c}) + (C \times F_{c})]/2000$	Formatted
Where:	Deleted: + (0.10 x H) [[15]
	Formatted
$E_c = Total PM_{10}$ emissions from the coal preparation plant, $+ +$ (tons);	Formatted
	Formatted [18]
T = Amount of coal transferred by conveyances directly	Deleted: or PM
connected to the coal preparation plant, (tons);	Formatted
$F_m = (k * 0.0032 * N) * \{((U/5)1.3) / ((M/2)1.4)\}; + 1$	Deleted: bulk material
Where:	Formatted [20]
where:	Formatted
$k = 0.35 \text{ for } PM_{10};$	Deleted: .= .0.74 for PM: 1
U = mean wind speed, (miles/hour);	Formatted
	Deleted: material
<pre>M = material moisture content, (%);</pre>	Deleted: material S
N = Number of coal transfers (i.e., drop points);	Deleted: 0.0022 1b PM/t([23]
	Deleted: tons
S = Amount of bulk <u>coal screened</u> , (tons);	Deleted: bulk material C
$F_a = 0.00074 \text{ lb } PM_{10}/\text{ton};$	Deleted: 0.0012 15 PM/t([24]
() - Arount of coal orusted: (tenal)	Deleted: 1
C = Amount of coal crushed; (tons);	Deleted: F1 = .gallons of [25]
$F_c = 0.00054 \text{ lb } PM_{10}/\text{ton}.$	Formatted [26]
1	Formatted
	Formatted [28]
	Formatted
•	

ļ

Page 9

j

b. A limit on PM emissions is established by the limit on PM ₁₀ emissions		Deleted: b
because the calculation of PM and PM_{10} use the same formulae and same data inputs, with the only difference being in emission factors,	1 2	Deleted: and
which are constants. Therefore, a limit on PM10 sets a direct cap on	1	Deigted: the two diesel-
PM and when calculated PM ₁₀ emissions remain below the limits of this	1 11	nowered generators small
permit, the calculated emissions of PM will be below the thresholds	191	non-mobile engines and [30]
of Condition 1b.	4, ,	Formatted: Keep lines together
C. Emissions from the operation of non-mobile, fuel combustion sources not of	ŕ,	Formatted: Underline
excluded as insignificant sources in 35 Ill. Adm. Code 201.146 shall	1,	Formatted: Underline
not exceed the following limits:	1.11,	Deleted: Week
Emissions	11.	Formatted: Underline
Pollutant Ton/Month Ton/Year	Ë	Formatted: Underline
Carbon Monoxide (CO) <u>9.2</u> 92.0 + Nitrogen Oxides (NO _x) <u>9.2</u> 92.0		Formatted: Tabs: 5.88", Left
Nitrogen Oxides (NOx) 9.2 92.0 Sulfur Dioxide (SO2) 2.196 21.9	1.	Deleted: 2.38
Volatile Organic Material (VOM) 4.01, 40.1	(1, 1)	Deleted: 5
PM ₁₀ 2.35 23.5		Deleted: 2,38
Emissions from the diesel-powered generators are based on standard	(¹)	Deleted: 5
emission factors (Table 3.4-1, AP-42, Fifth Edition, Volume I,	<i>⁴</i> , '	Deleted: 1,67
Supplement B, October 1996) and are calculated as follows:	11,1	Deleted: 6618
ранкрур (2 000 — 4) 	0 P . 1	<u>}</u>
$E = H \times F \times D / 2,000$, a . i	Formatted: Highlight
E = Total emissions of pollutant	1 ¹¹ 11 1	Deleted: 0.63
The Trading Porter (in Secondary)	1^{11} 1^{1	Deleted: 25.0
D = Engine Duty (in horsepower)	1 ¹¹ 11 11 11	Formatted: Subscript
H = Hours of operation of unit (hours)	1 ¹ 11	Formatted [31]
De Defector Determine Filler		Formatted: Keep lines together
F = Emission Factor as follows:		Deleted: The e
Large ≥ 600 Hp	i.	Deleted: g 3.3-1 and
Stationary_Diesel		Deleted: . Emissions f [[32]
Engines Pollutant lbs/Hp-Hr	111	Formatted: Centered
Carbon Monoxide (CO)	101	Defeted: Emission [[33]
Nitrogen Oxides (NO.) . 0.024		Formatted
Sulfur Dioxide (SO ₂) Volatile Organic Material (VOM) 0.000705	de la l	Dejeted: Gasoline
volatile organic Material (vom)		Deleted: Industrial Engines
S = Wt. % sulfur in fuel		Deleted: Diesel
Principan from the promision of non-police and 1 (lass that 600 He)	11 1 11 1	Deleted: 1bs/Hp-Hr
Emissions from the operation of non-mobile, small (less than 600 Hp) fuel combustion sources not excluded as insignificant sources in 35	41 1 11 1	Deleted: 0.00696
Ill. Adm. Code 201.146 are based on standard emission factors (Table		Deleted: 0.011
3.3-1, AP-42, Fifth Edition, Volume I, Supplement B, October 1996 and		
are calculated as follows:	19	Deleted: 0.000591
$E = V \times F / 2,000$	끹	Deleted: 0.0216
Where:		Deleted: 64
E = Total emissions of pollutant;	۱,	Formatted: Superscript
	(Formatted: Keep lines together
		·

Page 10

V = Volume of fuel used, (gallons);

R = Heat content of fuel, (mmbtu/gallon) where R = 0.13 mmbtu/gallon of gasoline (AP-42 Appendix A) R = 0.137 mmbtu/gallon of diesel (AP-42 Appendix A);

F = Emission Factor as follows:

	Emissi	on Factors
·	<600 Hp Sta	tionary Engines
	Gasoline	Diesel/Kerosene
Pollutant	1bs/mmBtu	lbs/mmbtu
Carbon Monoxide (CO)	62.7	0.95 +
Nitrogen Oxides (NOx)	1.63	4.41
Sulfur Dioxide (SO ₂)	0.084	0.29
Volatile Organic Material (VOM)	3.03	0.36

The conversion from gallons into mmbtu for diesel conservatively includes kerosene since the heat content of kerosene is slightly lower than diesel.

- e. Compliance with the annual limits of this permit shall be determined once each month from the data for the current month plus the preceding 11 months (running 12 month total).
- 10a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:
 - i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.
 - ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such teets at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

Formatted: Indent: Left: 0.5", Tabs: Not at 0.5"]
- Deleted: c	- -
Deleted: a weekly basis	Ę
Deleted: the sum of Deleted: week	5
Deleted: 5	
Deleted: 5	ļ
Formatted: Keep lines together	5
Deleted: 1	

Formatted: Tabs: 1.88*, Left

Formatted: Superscript Formatted: Tabs: 5.5", Left

Page 11

1

requ	ing required by Condition 12 shall be performed upon a written west from the Illinois EPA by a qualified individual or independent ing service.
by t emis app] visi com with	The Illinois EPA, the owner or operator of a particulate matter sion unit subject to 35 Ill. Adm. Code Part 212 shall conduct the cicable testing for particulate matter emissions, opacity, or ble emissions at such person's own expense, to demonstrate liance. Such test results shall be submitted to the Illinois EPA in thirty (30) days after conducting the test unless an alternative of or submittal is agreed to by the Illinois EPA.
emis reco reta	The part to 35 Ill. Adm. Code 212.110(e), the owner or operator of an Deleted : 3 Sion unit subject to 35 Ill. Adm. Code Part 212 shall retain ords of all tests which are performed. These records shall be sined for at least three (3) years after the date a test is formed.
þ <u>. i.</u>	Pursuant to 35 Ill. Adm. Code 212.316(g) (1), the owner or operator of any fugitive particulate matter emission unit subject to 35 Ill. Adm. Code 212.316 shall keep written records of the application of control measures as may be needed for compliance with the opacity limitations of 35 Ill. Adm. Code 212.316 and shall submit to the Illinois EPA an annual report containing a summary of such information.
ii.	Pursuant to 35 Ill. Adm. Code 212.316(g)(2), the records required under 35 Ill. Adm. Code 212.316(g) shall include at least the following:
	 A. The name and address of the source; B. The name and address of the owner and/or operator of the source;
	C. A map or diagram showing the location of all emission units controlled, including the location, identification, length, and width of roadways;
	D. Por each application of water or chemical solution to roadways by truck: the name and location of the roadway controlled; application rate of each truck, frequency of each application, width of each application, identification of each truck used, total quantity of water or chemical used for each application and, for each application of chemical solution, the concentration and identify of the chemical;
	E. For application of physical or chemical control agents: The name of the agent, application rate and frequency, and total quantity of agent, and, if diluted, percent of concentration used each day; and
· ·	

Electronic_i Filing - Received, Clerk's Office, May 10, 2011

Page 12

c.

- E. A log recording incidents when control measures were not used and a statement of explanation.
- iii. Pursuant to 35 Ill. Adm. Code 212.316(g) (4), the records required * under 35 Ill. Adm. Code 212.316(g) shall be kept and maintained for at least three (3) years and shall be available for inspection and copying by Illinois EPA representatives during working hours.
- i. Pursuant to 35 Ill. Adm. Code 212.324(g)(1), written records of inventory and documentation of inspections, maintenance, and repairs of all air pollution control equipment shall be kept in accordance with 35 Ill. Adm. Code 212.324(f).
 - ii. Pursuant to 35 Ill. Adm. Code 212.324 (g) (2), the owner or operator shall document any period during which any process emission unit was in operation when the air pollution control equipment was not in operation or was malfunctioning so as to cause an emissions level in excess of the emissions limitation. These records shall include documentation of causes for pollution control equipment not operating or such malfunction and shall state what corrective actions were taken and what repairs were made.
 - iii. Pursuant to 35 Ill. Adm. Code 212.324(g)(3), a written record of the inventory of all spare parts not readily available from local suppliers shall be kept and updated.
 - iv. Pursuant to 35 Ill. Adm. Code 212.324(g)(5), the records required under 35 Ill. Adm. Code 212.324 shall be kept and maintained for at least three (3) years and shall be available for inspection and copying by Illinois EPA representatives during working hours.
- 11a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
 - i. all moisture content tests performed on coal processed through the coal preparation plant, including date, time, and individual or laboratory performing test, in accordance with Condition 8(a).
 - ii. all moisture contents of bulk solid materials provided by the suppliers of the bulk solid materials in accordance with Condition 8(b).
 - iii. all re-tests of the moisture content of bulk solid materials in accordance with , Condition &(b), including date, time, individual or laboratory performing test, and location of sample (e.g., prior to crushing, stockpiles, etc.); and
 - .iv. the name and total amount of each bulk solid material (e.g., coal, petroleum coke, etc.) processed (i.e., crushed or screened) or transferred in tons/month and tons/year;

v. the operating hours of each generator, hours/month and hours/year; and

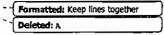
	Deleted: E
	Formatted: Indent: Left: 0.5", Tabs: Not at 0.5"
	Deleted: 3
	Deleted: 4
1.	Deletad: i. Records addressing use of good operating practices for the material handling operations at this source: ¶ ¶
444	Formatted: Keep lines together, Tabs: Not at 0.5" + 1"
	Formatted: Keep lines together
4 t) 1 t)	Formatted: Indent: Left: 0.5", Keep lines together, Tabs: Not at 0.5" +
	Deleted: A. If the Permittee is relying on Condition 9(a)(1) and 9(b) to demonstrate compliance with Condition 9(a), the Permittee shall maintain operating logs for the water spray equipment, including dates and hours of use [[35]
191	Deleted: 1
11	
11 1	Deleted: B
41 24	Deleted: If the Permittee
1,74,11	Deleted: a
	Deleted: the Permittee [38]
5.5	Formatted: Keep lines together
	Deleted: C The Permitt [[39]
¹ , 1	Formatted [40]
	Deleted: 9 [41]
1.4	Deleted: N
11	Deleted: ,
	Deleted:)
1,1	Deleted: week
1	Formatted: Keep lines together
1	Formatted [[42]
- 1	Deleted: 0
	Deleted: week

Page 13

vi. the monthly and annual emissions of CO, NO₈, PM, SO₂, and VOM from the source with supporting calculations (tons/month, and tons/year) and the monthly and annual emissions of PM₁₀, from the processing of coal in the coal preparation plant with supporting calculations (tons/month and tons/year).

- The Permittee shall maintain the following records to allow the confirmation of actual VOM emissions during the seasonal allotment period:
 - i. Records of operating data and other information for each individual emission unit or group of related emission units at the source, as appropriate, to determine actual VOM emissions during the seasonal allotment period;
 - ii. Records of the VOM emissions, in tons, during the seasonal allotment period, with supporting calculations, for each individual emission unit or group of related emission units at the source, determined in accordance with the procedures that my be specified in this permit; and
 - iii. Total VOM emissions from the source, in tons, during each seasonal allotment period, which shall be compiled by November 30 of each year.
- c. Unless otherwise specified in this permit, all records and logs required by this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.
- 14a. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.
- b. Pursuant to 35 Ill. Adm. Code 212.316(g) (5), a quarterly report shall be submitted to the Illinois EPA stating the following: the dates any necessary control measures were not implemented, a listing of those control measures, the reasons that the control measures were not implemented, and any corrective actions taken. This information includes, but is not limited to, those dates when controls were not applied based on a belief that application of such control measures would have been unreasonable given prevailing atmospheric conditions, which shall constitute a defense to the requirements of 35 Ill. Adm. Code 212.316. This report shall be submitted to the Illinois EPA thirty (30) calendar days from the end of a quarter. Quarters end March 31, June 30, September 30, and December 31.

_	
l	Formatted; Keep lines together
ĺ	Deleted: ii
	Deleted: Weekly
	Formatted: Subscript
	Deleted: PM10/
	Formatted: Not Superscript/ Subscript
	Formatted: Not Superscript/ Subscript
	Deletad: week
	Deleted: 1



Formatted: Keep lines together
Deleted: 5

Page 14

- c. i. Pursuant to 35 Ill. Adm. Code 212.324(g)(4), copies of all records required by 35 Ill. Adm. Code 212.324 shall be submitted to the Illinois EPA within ten (10) working days after a written request by the Illinois EPA.
 - ii. Pursuant to 35 Ill. Adm. Code 212.324(g)(6), upon written request by the Illinois EPA, a report shall be submitted to the Illinois EPA for any period specified in the request stating the following: the dates during which any process emission unit was in operation when the air pollution control equipment was not in operation or was not operating properly, documentation of causes for pollution control equipment not operating or not operating properly, and a statement of what corrective actions were taken and what repairs were made.
- 15a. If there is an exceedance of or a deviation from the requirements of this permit, as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance or deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or deviation and efforts to reduce emissions and future occurrences.

b. Two (2) copies of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency Division of Air Pollution Control Compliance Section (#40) P.O. Box 19276 Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency Division of Air Pollution Control 9511 West Harrison Des Plaines, Illinois 60016

If you have any questions on this permit, please call George Kennedy at 217/782-2113.

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

ECB:GMK:jws

cc: Illinois EPA, FOS Region 1 Lotus Notes Formatted: Keep lines together

Deleted: s

Electronic₁Filing - Received, Clerk's Office, May 10, 2011

Page 15

Attachment A- Emission Summary

This attachment provides a summary of the maximum emissions from the source operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from the source. The resulting maximum emissions are below the levels at which this source would be considered a major source for purposes of the Clean Air Act Permit Program (e.g., 100 tons/year for CO, NO_x, and PM₁₀) and below the levels at which this source would be considered a significant major source for purposes of the Federal PSD program (i.e., 250 tons/year for PM). Actual emissions from this source will be less than calculated in this summary to the extent that control measures are more effective than required in this permit and the amounts of materials handled and fuel consumed are less than the theoretical maximums.

E M I S S I O N S (Tons/Year)

Emission Unit	<u>ço</u>	NOx	PM	PM10	SO2 VOM
<u>Coal Preparation Plant</u> , Fuel Combustion	92.0	92.0	250.0		21.9, 40.1, Activities
Totals	92.0	92.0	250.0	88.0	21.9 40.1
GMK: jws					Deleted: 9
					Deleted; 5
					Deleted; 5

Deleted: 5 Formatted: Highlight Deleted: 66.8 Deleted: 25.0 Deleted: 5 Deleted: 5 Deleted: 95 Deleted: 9 Deleted: 5 Formatted: Highlight Deleted: 65.8 Deleted: 25.0

Page 2: [1] Deleted Steinest 7/2/2009 12:13:00 PM

- d. Pursuant to 35 Ill. Adm. Code 212.304(a), all storage piles of materials with uncontrolled emissions of fugitive particulate matter in excess of 50 T/yr shall be protected by a cover or sprayed with a surfactant solution or water on a regular basis, as needed, or treated by an equivalent method, in accordance with the operating program required by Sections 212.309, 212.310 and 212.312 of this Subpart.
- e. Pursuant to 35 Ill. Adm. Code 212.305, all conveyor loading operations to storage piles specified in 35 Ill. Adm. Code 212.304 shall utilize spray systems, telescopic chutes, stone ladders or other equivalent methods in accordance with the operating program required by Sections 212.309, 212.310 and 212.312.
- f. Pursuant to 35 Ill. Adm. Code 212.306, all normal traffic pattern access areas surrounding storage piles specified in 35 Ill. Adm. Code 212.304 shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by 35 Ill. Adm. Code 212.309, 212.310 and 212.312.
- g. Pursuant to 35 Ill. Adm. Code 212.307, all unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods.
- Page 2: [2] Deleted i. Conveyor loadout to trucks and railcars shall be conducted with sleeves extending to at least 6 inches below the sides and the receiving vehicle, except for topping off
 - ii. Conveyor loadout sleeves shall be inspected for proper operation while such loadout to trucks or railcars is occurring, at least once each week when such loadout to trucks or railcars is performed.

Page 7: [3] Deleted source as provided by the supplier of the bulk material. If moisture content falls below 3.0% by weight as documented by the supplier, then the Permittee shall:

i. U'

ii. Follow the testing requirements of Condition 9(c).

b. If the Permittee relies on Condition 9(a)(i) to demonstrate compliance with Condition 9(a), the Permittee shall monitor the water spray equipment as follows during non-freezing conditions:

- i. The water supply to the spray equipment shall be equipped with a master metering device used to determine water usage for the control of particulate matter emissions.
- ii. Inspections of water spray equipment and operation (such as leaking, maintaining adequate flow, clogging of flow lines, etc.) shall be performed at least once per week when the material handling operations are in operation
- c. If the Permittee relies on Condition 89(a)(ii) to demonstrate compliance with Condition 9(a), the Permittee shall measure the moisture content of a representative sample of the bulk material having a moisture content below 3.0% as provided by the supplier, at least once per week, when water spray is not being utilized,
- Page 7: [5] Deleted steine3t 8/5/2009 11:50:00 AM Should three consecutive tests at the source show moisture contents of 3.0% or greater by weight, this testing shall no longer be required for the subject bulk material.

Page B: [6] Formatted Steine 3: Stei

Page 8: [7] Defeted steine3t. 7/2/2009 2:18:00 PM

- e. The Permittee shall not keep, store or use distillate fuel oil (Grades No. 1 and 2) at this source with a sulfur content greater than the larger of the following two values:
 - i. 0.28 weight percent, or

2.38

ii. The wt. percent given by the formula: Maximum wt. percent sulfur = (0.00015) x (Gross heating value of oil, Btu/lb).

Page 8: [8] Formatted Steinest Keep lines together

Page 8:[9] Deleted steine3t 8/5/2009 11:54:00 AM

Page 8: [10] Deleted. steine3: 8/7/2009 7:14:00 AM. the following limits:

PM emissions Tons/Year Tons/Week Tons/Year
2.38

Page 8: [11] Deleted _______ steine3t. ______ 8/7/2009 7:14:00 AM 3 ______

Page 8: [12] Deleted the maximum amount of material handled

Page 8: [13] Formatred Indent: Left: 0", Tabs: Not at 1"

Page 8: [14] Formatted steine3t 8/5/2009:12:04:00 PM

Subscript

Page 8: [15] Deleted + (0.10 x H) + (0.31 x F1 x V1) + (4.41 x F2 x V2))

Page 8: [16] Formatted steine3t Indent: Hanging: 1"

Page 8: [17] Formatted Indent: Left: 1", Hanging: 0.5", Tabs: Not at 1.75"

Page 8: [18] Formatted Subscript

 Page 8: [19] Formatted
 stelnest
 7/2/2009 2:50:00 PM

 Indent: Left: 1", Hanging: 0.5", Tabs: Not at 1.75"

Page 8: [21] Formatted Steine3t 7/2/2009 2:50:00 PMS

Page 8: [22] Formatted steine3t: 8/5/2009 11:57:00 AM Indent: Left: 2", Hanging: 0.5", Tabs: 2", Left + 2.5", Left + Not at 4.25"

Page 8: [23] Deleted 0.0022 lb PM/ton;

Page 6: [25] Deleted $F_1 = \text{gallons of gasoline use}$ (8/7/2009.8:05:00 AM

 F_2 = gallons of diesel plus kerosene use

=

 $V_1 = 0.13$ mmbtu/gallon of gasoline (AP-42 Appendix A)

 $V_2 = 0.137 \text{ mmbtu/gallon of diesel (AP-42 Appendix A)}^*$

The conversion from gallons into mmbtu for diesel conservatively includes kerosene since the heat content of kerosene is slightly lower than diesel.

Page 8: [25] Formatted Stelle3t Subscript

Page 8: [27] Formatted steine3t 8/772009 8:08:00 AM

Page 8: [29] Formatted: Subscript

Page 9: [30] Deleted stelled the two diesel-powered generators small non-mobile engines and portable heaters at the

		n generato					8/7/2009 7	:53:00 AM
Page 9: [3]	3] Deleted			te lne3t		mission		
Page 9: [3 [ndent :	• • • •	0", Har		telne3t 3 "	K-MA-SK	2728 (1	/3/20097	:44:00 AM
Page 12: [35] Deleted A.	9(b) to the Perm water sp usage, t malfunct dates of daily ob or dry)	ermittee demonstr ittee sh ray equi otal amo ions (ty rainfal servatio	is rely ate comp all main pment, i unt of w pe, date l during ns of bu ther con	ying on pliance including water app a, and mig the pr ulk mate introls a	Condition with Correlating g dates plied easures ecceding rial correlations s may be	on 9(a) (dition logs fo and hou ch mont to corr 24 hour ditions	<pre>i) and 9(a), r the rs of h, ect), s, and (wet</pre>
	B6]Formatte Left:	а 0.5", т					/7/20098 1.5"	44:00 AM
	relying	on the re istrate co	quirement	ts of Co				
	ne Permit	tee shall performe	maintai					
Page 12: [: C.	The F bulk	Permittee materials ials in a	shall ke as prov	ep.recon ided by	ds of th the supp	ne moist pliers o	ure con	tent of

Page 12: [41] Deleted steine3t 8/5/2009 12:39:00 PM

Page 12: [42] Formatted Steine 3t St

1

October 16, 1995

MEMORANDUM

1.

SUBJECT: Definition of Regulated Pollutant for Particulate Matter for Purposes of Title V

FROM: Lydia N. Wegman, Deputy Director /s/ Office of Air Quality Planning and Standards (MD-10)

TO: See Addressees

In a guidance memorandum dated April 26, 1993, the Agency clarified its interpretation of the term "regulated air pollutant" as defined in the operating permit rule (see 40 CFR 70.2). Recently, many discussions have been held concerning the application of this definition to sources of particulate matter under the title V operating permit program. Today's memorandum provides additional guidance to assist permitting authorities in determining which sources of particulate matter are subject to the requirements of title V.

There are different forms of particulate matter for which controls are required by various regulations. The April 26, 1993 memorandum listed PM-10 and total suspended particulates as regulated forms of particulate matter and, consequently, regulated air pollutants. The EPA has recently reevaluated this finding and has concluded that its definition of regulated air pollutant under title V applies only to emissions of PM-10. A detailed discussion of the basis for this conclusion is attached.

Today's guidance should be used to determine which sources of particulate matter are subject to minimum title V requirements and fee calculations. The Federal minimum for applicability of title V to sources of particulate matter should be based on the amount of emissions of PM-10, not particulate matter, that the source has the potential to emit. Some sources [such as country grain elevators, aggregate (rock, gravel, and sand) handling operations, and some mining operations] may not be major sources of PM-10 even though they would have been considered major sources of particulate matter.

This guidance does not change any requirements for sources to comply with emission limitations or work practice standards as described in State implementation plans (SIPs) and new source performance standards (NSPS). For example, the required procedures for determining compliance with NSPS continue to be based on in-stack measurements of particulate emissions or visible emissions observations (i.e., Test Methods 5, 9, 17, and 22, and Performance Specification 1). The Federal minimum is that if sources are major, then they must obtain title V operating permits which include all applicable requirements. Therefore, if a source is major for particulate matter, but not for PM-10, the Federal minimum would be that a title V operating permit would not be required if the only pollutant that would make the source major is particulate matter. Any requirements to comply with NSPS or SIPs would remain in effect, however.

This clarification of PM-10's status as the regulated pollutant will cause some difficulties in estimating emissions; however, tools are available for many source categories. For example, although some 1900 particulate matter emission factors can be found in the document referred to as "AP-42," there are also over 1200 PM-10 factors. In addition, category specific particle-size distributions are available for a number of other categories on EPA's data bases.

This revision of previous guidance constitutes a change only with regard to the title V operating permit program. It does not change any other interpretations or requirements that have been previously provided for implementing the Clean Air Act.

The policies set forth in this memorandum are intended solely as guidance and not final Agency action. This guidance cannot be relied upon to create any rights enforceable by any party. For further information on the title V aspects of this guidance, please contact Leo Stander at 919-541-2402, and for further information on emissions estimation techniques, please contact David Mobley at 919-541-4676.

Attachment

3

Addressees: Director, Office of Ecosystem Protection, Region I Director, Air & Waste Management Division, Region II Director, Air, Radiation & Toxics Division, Region III Director, Air, Pesticide & Toxics Management Division, Region IV Director, Air and Radiation Division, Region V Director, Multimedia Planning and Permitting Division, Region VI Director, Air, RCRA and TSCA Division, Region VII Director, Office of Pollution Prevention, State and Tribal, Region VIII Director, Air & Toxics Division, Region IX Director, Office of Air, Region X

cc: Chief, Air Branch, Regions I-X
Operating Permits Program Contact, Regions I-X
OAQPS Division Directors

REGULATED AIR POLLUTANT: PARTICULATE MATTER

This document explains the Environmental Protection Agency (EPA) policy that, at this time, PM-10 is considered to be the only regulated form of particulate matter. Today's policy supersedes prior EPA statements which indicated that a second regulated form of particulate matter existed. As explained further below, such prior statements were based on the fact that EPA had established specific compliance methods for sources of particulate matter under the new source performance standards (NSPS). The immediate consequence of this policy is that under the title V operating permits program only PM-10 is considered by EPA to be the regulated form of particulate matter for applicability and fee purposes. This policy does not affect (1) existing requirements under the NSPS that a source comply with applicable performance standards for particulate matter emissions or (2) provisions contained in State implementation plans for particulate matter, including existing particulate emissions limitations, which have been approved by EPA and are relied upon to attain or maintain the national ambient air quality standards (NAAQS) for particulate matter.

<u>Background</u>

The part 70 regulations for State title V operating permit programs define "regulated air pollutant" at 40 CFR 70.2. This definition is intended to ensure that permitting authorities receive appropriate information on all pollutants which are "regulated" under the Clean Air Act (Act) and emitted by a source. The term "regulated air pollutant" is intended to reflect all pollutants subject to a standard, regulation, or requirement by including in the definition five specific categories of pollutants which would be considered regulated air pollutants.¹ Questions have arisen, based on an EPA-issued memorandum on April 26, 1993, entitled "Definition of Regulated Air Pollutant for Purposes of Title V," concerning how many regulated forms of particulate matter the definition includes. The memorandum identified two regulated indicators--PM-10 and total suspended particulate (TSP). The PM-10 was considered regulated because it was a pollutant for which a NAAQS had been

The five categories of pollutants included (1) nitrogen oxides and volatile organic compounds, (2) any pollutant for which NAAQS have been established, (3) any pollutant that is subject to an NSPS under section 111, (4) certain ozone depleting substances, and (5) any pollutant subject to national emission standard for hazardous air pollutants (NESHAP) under section 112. promulgated. The TSP was listed as a pollutant regulated under the NSPS.²

Implied in the April 1993 memorandum (though not explicitly stated therein) was the interpretation that the NSPS for particulate matter--which measures a different form of particulate than PM-10--automatically constituted a separate regulated indicator for particulate matter. The EPA has reevaluated this interpretation and has concluded that it is no longer appropriate. It is EPA's current position that different indicators for particulate matter may be used as surrogate measures where appropriate for controlling ambient concentrations of PM-10 without specifically requiring such surrogates themselves to be regarded as regulated pollutants. The EPA further believes that the basis for determining what the regulated pollutant or indicator is for particulate matter should focus on EPA's intent as evidenced primarily by the underlying statutory authority used by EPA to subject the relevant air pollutant to a standard, regulation or requirement, and by statements made by EPA in connection with its promulgation. This interpretation does not preclude EPA from specifically choosing to regulate a different indicator for particulate matter under the authority of section 111 of the Act. However, as explained below, it was not EPA's intent to do so for any of the NSPS promulgated to date for particulate matter.

Section 109 authority

To date, EPA's efforts to regulate particulate matter have relied primarily upon the joint authorities of sections 108 and 109 of the Act. Section 108 directs the Administrator to identify pollutants which may reasonably be anticipated to endanger public health or welfare and to issue air quality criteria for those pollutants. Section 109 of the Act then governs the establishment and revision of NAAQS for criteria pollutants. On April 30, 1971, EPA promulgated the original NAAQS for particulate matter. The NAAQS defined ambient concentrations of particulate matter measured as TSP (ambient compliance sampling achieved by "high volume" samplers which collect particulate matter up to a nominal size of 25 to 45 micrometers). On July 1, 1987, EPA revised the NAAQS for particulate matter, replacing the TSP indicator with the new PM-10 indicator.

The EPA subsequently acknowledged that the correct description of the indicator considered to be regulated under the NSPS was "particulate emissions" as measured by in-stack test methods, e.g., Federal Reference Method 5.

3

Section 111 authority

The control of particulate matter is also required by various NSPS under section 111 of the Act. Section 111 generally requires EPA to promulgate NSPS for any category of stationary sources that "...causes, or contributes significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare." The EPA promulgated numerous NSPS specifically to address the criteria pollutant, particulate matter, during the period of time when the NAAQS for particulate matter were measured as TSP. While EPA indicated that particulate matter was a criteria pollutant for which NAAQS had been promulgated, EPA compliance tests used to meet the specific NSPS for particulate matter did not use the same indicator as the indicator for the NAAQS for particulate matter. Instead, such compliance tests typically involved measures of particulate matter in the stack using emissions testing procedures (e.g., Method 5) that do not take into account particle size. Nevertheless, preamble discussions to certain of these NSPS show that EPA regarded the pollutant of concern to be the criteria pollutant for which NAAQS had been promulgated. See e.g., NSPS for Phosphate Rock Plants (9/21/79), Nonmetallic Mineral Processing Plants (8/1/85), and Calciners and Dryers in Mineral Industries (9/28/92).

With the promulgation of PM-10 NAAQS in 1987, EPA considered the issue of whether to revise the NSPS with respect to particulate matter. In a July 1, 1987 Federal Register notice, EPA acknowledged that the indicator for particulate matter used to measure compliance with the NSPS was different from both TSP and PM-10 (52 FR 24710). The EPA stated, therein, that the existing NSPS "that reflect the best demonstrated control technology for particulate matter have the effect of controlling PM-10." The EPA later decided that, at least until further studies could be accomplished, the existing NSPS for particulate matter would serve as adequate surrogates for limiting ambient amounts of PM-10, the intended "regulated air pollutant." The NSPS promulgated after 1987 have continued to base compliance on in-stack emissions test methods which measure particulate emissions. Based on this regulatory history, it is EPA's position that the use of particulate matter emissions as the measure of compliance under various NSPS for particulate matter does not, in itself, constitute a new regulated air pollutant, but is simply designed as a surrogate measure of particulate matter to establish effective performance standards which limit the emissions of the regulated indicator, PM-10.

4

While the EPA contends that the control of a pollutant under an NSPS does not automatically result in that pollutant being considered regulated if the intended pollutant is already being regulated under separate legal authority, the EPA does specifically rely upon the NSPS to regulate certain pollutants. A case in point is the NSPS for kraft pulp mills at 40 CFR 60 subpart BB, which includes limitations for emissions of total reduced sulfur compounds. This and other specific non-criteria pollutants are considered "regulated air pollutants" by virtue of the fact that EPA intended for them to be regulated by the NSPS, since they are not regulated elsewhere.

Other examples of surrogate measures

The EPA has used the measurement of particulate matter emissions for compliance purposes as the surrogate for controlling the pollutant intended to be regulated in the section 112 context as well. Examples of such situations are the NESHAP for arsenic and asbestos at 40 CFR 61.140 and 61.170, respectively. The EPA listed asbestos and arsenic as hazardous pollutants under section 112 of the Act. Subsequently, the EPA promulgated standards for several sources of asbestos and for inorganic arsenic emissions from primary copper smelters which require compliance with a particulate matter emissions limit using Method 5 and opacity monitoring (51 FR 27956, August 4, 1986 at 27981.) Nevertheless, the EPA considers arsenic and asbestos, as listed in accordance with section 112 of the Act, to be regulated pollutants in these instances.

Other implications

Nothing stated in this current policy is intended to negate, void or otherwise affect limits expressed as particulate matter emissions under any NSPS, or the enforceability of existing standards contained in State control strategies for PM-10 which may actually require compliance with other indicators for particulate matter. The EPA historically has allowed States to rely upon their original SIPs based on the control of particulate matter emissions to demonstrate attainment with the PM-10 NAAQS. The EPA continues to consider these plans to be adequate so as to remain in effect and be enforceable as long as they continue to be used to demonstrate attainment of the regulated indicator for particulate matter, PM-10. March 6, 2003

(A-18J)

Janet McCabe, Assistant Commissioner Office of Air Quality Indiana Department of Environmental Management 100 North Senate Avenue P.O. Box 6015 Indianapolis, Indiana 46206-6015

Dear Ms. McCabe:

In discussions with United States Environmental Protection Agency (EPA) Region 5, State permitting authorities have requested clarification on our fugitive emissions policy. Specifically, the States have asked EPA to clarify to what extent, and from which emission units, are fugitive emissions counted towards major source applicability for Title V, nonattainment new source review (NSR), and prevention of significant deterioration (PSD). Various EPA letters and memoranda provide guidance on when you count fugitive emissions to determine whether a source is a major stationary source subject to Title V, NSR, or PSD, but there is no one guidance document which addresses the various scenarios which arise.

In the enclosed analysis, we are providing some examples that should help you understand when to include fugitive emissions in determining whether a source is major for purposes of Title V, NSR, or PSD. However, no part of this document, including the following examples, create any new legally binding obligations. Rather, the purpose of this document is to help you understand the statutory provisions and regulations which govern when fugitive emissions are included in major source determinations and EPA's interpretation of these provisions and regulations.

This response has been coordinated with staff in EPA's Office of Air Quality Planning and Standards, Office of Enforcement and Compliance Assurance, and Office of General Counsel in order to help assure completeness and accuracy.

If you have any questions regarding this letter, please contact Sam Portanova, of my staff, at (312) 886-3189.

Sincerely yours,

/s/ (Stephen Rothblatt for)

Cheryl L. Newton, Acting Director Air and Radiation Division

Enclosure

ANALYSIS

What Effect Did the November 27, 2001, Title V Rulemaking Have on the Counting of Fugitive Emissions?

On November 27, 2001 (66 FR 59161), EPA published a rule, "Change to Definition of Major Source," that requires or clarifies the following for Title V:

- An owner or operator of a source must include the fugitive emissions of all pollutants regulated under the Clean Air Act in determining whether the source is a major stationary source under Title V if the source falls within one of the source categories listed through a rulemaking pursuant to section 302(j) of the Act ("listed source categories").¹ Included as listed source categories are source categories regulated by a section 111 or 112 standard on or before August 7, 1980.
 - An owner or operator of a source that falls within a listed source category that was regulated by a section 111 or 112 standard on or before August 7, 1980, must include the fugitive emissions of all air pollutants regulated under the Act, not just those pollutants regulated by the section 111 or 112 standard, in determining whether the source is a major stationary source under Title V.
 - An owner or operator of a source must include the fugitive emissions of all hazardous air pollutants ("HAPs") listed under section 112(b) of the Act in determining whether the source is a major source for purposes of section 112 and Title V, regardless of whether the source falls within a listed source category. <u>See National Mining Ass'n v. EPA</u>, 59 F.3d 1351 (D.C. Cir. 1995).

What Are Some Examples of When You Count Fugitive Emissions to Determine Whether Your Source is Major?

Below are several scenarios that illustrate how to consider fugitive emissions in determining whether a source is a major stationary source.² You should note that the examples below rely

¹ For the purposes of this document, "listed source categories" refer to the source categories identified in 40 CFR §§ 51.165(a)(1)(iv)(C), 51.166(b)(1)(iii), 52.21(b)(1)(iii), 52.24(f)(4)(iii), and the second definition of "major source" in 40 CFR 70.2 and 71.2.

² Consistent with a voluntary remand in a case regarding the question of when is a source of fugitive emissions major for purposes of Title V, EPA has rescinded its interpretation of what the collocation language of 40 CFR part 70 requires with respect to unlisted sources of fugitive emissions. As explained in a memorandum from

on certain assumptions regarding the complex industrial facilities described. The question of what is the primary activity at such a source or what emission units are properly considered to be a part of the source can be difficult to answer in any given case. The assumptions underlying these examples are not intended to shortcut the very fact intensive inquiry that such questions may require.

Scenarios

The first 3 scenarios below apply to the counting of fugitive emissions of regulated pollutants. The last scenario applies to the counting of fugitive emissions of any HAP listed under section 112(b) of the Act.

1. A stationary source in a listed source category. If the primary activity of a stationary source falls within a listed source category, then fugitive emissions are included from all emissions units at the source. The stationary source encompasses not only all emission units within the same SIC code at the facility, but also emission units at support facilities that are part of the source.

Examples:

- A petroleum refinery. Petroleum refineries are a listed source category. You include fugitive emissions from the refinery to determine whether it is a major stationary source.
- A steel mill with an onsite slag handling operation. The primary activity of the source, in this case, is the production of steel, and steel mills are a listed source category. Although slag handling is not a listed source category, the onsite slag handling operation here is a support facility for the steel mill. You include fugitive emissions from the steel mill (a listed source category and the primary activity at this source) as well as the fugitive emissions from the slag handling operation (an unlisted source category, but one which supports the primary activity here) to determine if the source is a major stationary

EPA, States have discretion in interpreting what the part 70 rule's collocation language requires with respect to unlisted sources of fugitive emissions. Memorandum from Lydia Wegman to Regional Air Director (June 2, 1995) (http://www.epa.gov/Region7/programs/artd/air/title5/t5memos/amcguide.pdf). Please refer to this memorandum for an explanation of the scope of the voluntary remand. As a result of this voluntary remand, the first two scenarios discussed below may, or may not, be applicable to the implementation of part 70 in your State, depending on your State's exercise of its discretion.

- 3 -

source.

• A fossil-fuel-fired steam electric plant of more than 250 million BTUs per hour heat input located a short distance away from a coal mine that supplies all of its coal to the steam electric plant. The primary activity of the source, in this case, is the generation of steam and electricity, and steam electric plants as described above are a listed source category. You include fugitive emissions from the steam electric plant (a listed source category and the primary activity at this source) as well as the fugitive emissions from the coal mine (an unlisted source category and the support facility at this source) to determine if the source is a major stationary source.

2. A stationary source in an unlisted source category. If the primary activity of a stationary source falls within a source category that is not listed, then as a general matter fugitive emissions from the emissions units at the source are not included in determining whether the source is a major stationary source. However, if the source also contains emission units which do fall within a listed source category (or categories), then you include fugitive emissions from these listed emissions units to determine if the source is a major stationary source.

Examples:

- A food processing plant that has several petroleum liquid storage tanks subject to the NSPS in 40 CFR part 60, subpart Ka. The primary activity of the source, in this case, is the processing of food, and food processing plants are not a listed source category. The storage tanks, however, fall within a listed source category as this source category was regulated by subpart Ka as of August 7, 1980. You include fugitive emissions only from the storage tanks to determine if the source is a major stationary source.
 - A coal mine with an onsite coal cleaning plant with a thermal dryer. The primary activity of the source, in this example, is the mining of coal, and coal mines are not a listed source category. The coal cleaning plant, however, does fall within a listed source category. You include fugitive emissions only from the coal cleaning plant to determine if the source is a major stationary source.

3. A stationary source in one of the source categories regulated by a section 111 new source performance standard (NSPS) on or - 4 -

before August 7, 1980, that contains emissions units that are grandfathered from the NSPS requirements (e.g., constructed before the applicability date of the NSPS) or that are not regulated as "affected facilities" under the NSPS. You include fugitive emissions from all emission units at the source to determine if it is a major stationary source because the source falls within a listed source category. The decision to include fugitive emissions from a stationary source is not influenced by whether specific emissions units are subject to regulation.

Examples:

- A grain elevator of the type covered by the NSPS in 40 CFR part 60, subpart DD, but which is grandfathered from the requirements of this NSPS. Since subpart DD was promulgated prior to August 7, 1980, the grain elevator falls within a listed source category. You include fugitive emissions from the grain elevator to determine if the source is a major stationary source.
- A coal prep plant of the type covered by the NSPS in 40 CFR part 60, subpart Y. The coal prep plant falls within a listed source category as this source category was regulated by subpart Y as of August 7, 1980. The coal prep plant includes emissions units that are not regulated as "affected facilities" under the NSPS. You include fugitive emissions from all emission units at the coal prep plant to determine if the source is a major stationary source, including fugitive emissions from the units that are not regulated as "affected facilities" under the NSPS.

4. A source which emits fugitive emissions of any HAP listed under section 112(b) of the Act.³ You include fugitive HAP emissions from all emissions units at a source to determine if the source is a major source without regard to whether the source falls within a listed source category. Although most emissions of HAPs are nonfugitive due to advancing technology, some likely emitters of fugitive HAPs as of the date of this letter are pumps, valves, compressors, or flanges found at petroleum refineries, chemical processing plants, tank farms (i.e., facilities which have a collection of storage tanks), and crude oil and natural gas production facilities.

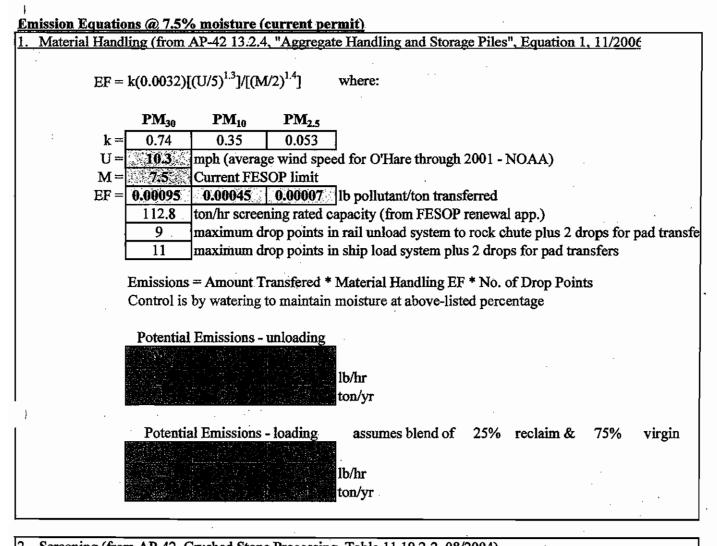
³ This scenario is relevant for determining whether a source is a major source for purposes of section 112 and therefore Title V. (See first definition of "major source" in 40 CFR 70.2 and 71.2). The inclusion of fugitive emissions of HAPs in major source determinations is generally not relevant for PSD. The requirements of the PSD program do not apply to pollutants listed as HAPs under section 112(b) of the Act. See 42 U.S.C. § 7412(b)(6).

In reading this document, please remember that it is not a regulation and does not substitute for the applicable regulations. The Clean Air Act and EPA's regulations governing NSR, PSD, and Title V contain legally binding requirements. In contrast, the statements made in this document do not create legal rights or impose legally binding requirements on EPA, the States, or the regulated community. Rather, the purpose of this document, including the scenarios above, is to help you understand the statutory provisions and regulations which govern when fugitive emissions are included in major source determinations and EPA's interpretation of these provisions and regulations. It is important to note that any decisions regarding a particular facility will be made based on the statute and regulations.

This discussion of various possible scenarios is not exhaustive. In deciding whether to include fugitive emissions from a stationary source in determining major source applicability, you may find the following sources of information useful in addition to those mentioned above:

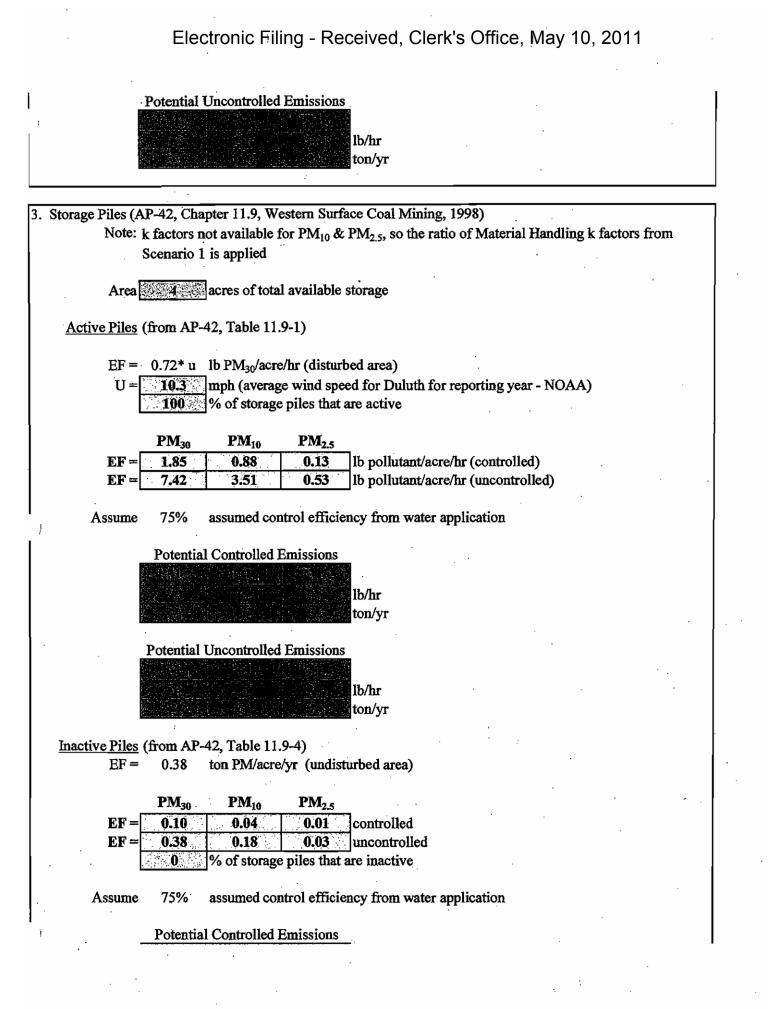
- "Requirements for Preparation, Adoption, and Submittal of Implementation Plans; Approval and Promulgation of Implementation Plans," 45 Fed. Reg. 52676, 52695 (August 7, 1980)
- "Requirements for Implementation Plans: Surface Coal Mines and Fugitive Emissions; Approval and Promulgation of Implementation Plans," 54 Fed. Reg. 48870, 48881-48882 (Nov. 28, 1989)
- "New Source Performance Standards (NSPS) Applicability of Standards of Performance for Coal Preparation Plants to Coal Unloading Operations," 63 Fed. Reg. 53288, 53290 (October 5, 1998)
- Letter from Edward J. Lillis to Thomas C. O'Connor (Oct. 14, 1994) (http://www.epa.gov/rgytgrnj/programs/artd/air/title5/ t5memos/fugitive.pdf)
- Letter from Robert G. Kellam to Donald P. Gabrielson (March 1, 1996) (http://www.epa.gov/rgytgrnj/programs/artd/air/ title5/t5memos/donaldpg.pdf)

Emission Calculations - KCBX Terminals Co. Chicago, IL



	PM	PM ₁₀	PM _{2.5}	la altra da com
F=	0.0022	0.00074		lb pollutant/ton screened (controlled)
F ≕	0.025	0.0087	0.00013	lb pollutant/ton screened (uncontrolled)
Ň	300	ton/hr scree	ning rated c	apacity (from FESOP renewal app.)
ł	Emissions	= Amount s	creened * Se	creening EF
· (Controlled	l emissions a	re those wit	h material moisture content of at least 2.88 %
		(see footnot	e b to AP42	Table 11.19.2-2)
	Potentia	Controlled	Emissions	

ton/yr



lb/hr ton/yr	
Potential Uncontrolled Emissions lb/hr ton/yr	· .

4. Vehicle Traffic

Unpaved Roads (AP-42 Section 13.2.2 Unpaved Roads, 2003) Applicable for 90% of vehicle traffic (estimate)

 $EF = k(s/12)^{a} (W/3)^{b} [(365-P)/365] lb/vehicle mile traveled (VMT)$

2,628,000 tons/yr maximum screener throughput

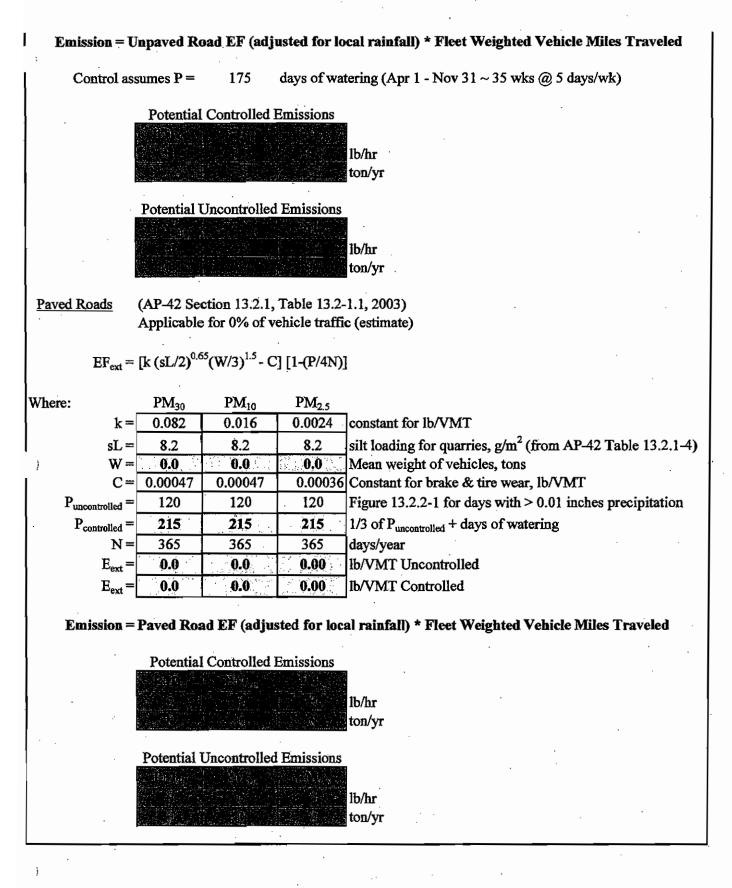
 $W = \sum_{i=1}^{N} e_{i}$

 $\frac{\sum (VMT * avg vehicle wt)}{Total VMT}$ Mean Vehicle Fleet Weight for all vehicle types

		•			C	Operating	3	VI	MT
		Weight (tons)			Distance ¹	Speed	Time	Unpave d	Paved
Vehicle Type	Number	Loaded	Empty	Average	(mi)	(mi/hr)	(hrs/yr)	(mi/yr)	(mi/yr)
End loader/dozer	1	20.0	10.0	15.0	0.03	1		7,466	0
Water truck ²	1	20.0	5.0	12.5		5.0	52	260	0
Haul truck	105,120	40.0	15.0		0.8			84,096	0
¹ round trip							Total =	91,822	0

²50 fills/year @ 1 hr each

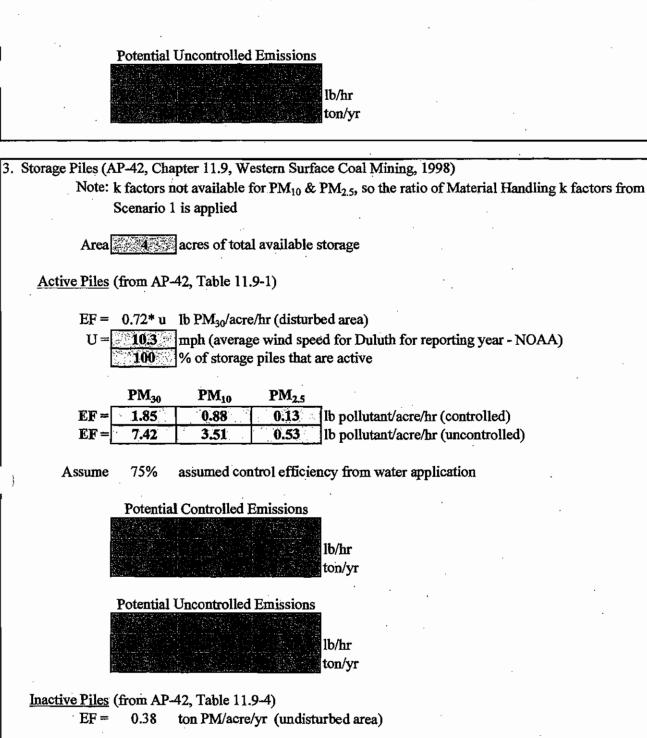
Where:	PM ₃₀	PM_{10}	PM _{2.5}	
k =[4.9	1.5	0.15	constant for lb/VMT
a=[0.7	0.9	0.9	
! b=	0.45	0.45	0.45	
s =	5.1	5.1	5.1	road surface % silt (AP-42 Table 13.2.2.1 for Plant Road)
W =	26.4	26.4	26.4	Mean weight of vehicles, tons
$P_{uncontrolled} =$	120	120	120	Figure 13.2.2-1 for days with > 0.01 inches precipitation
$\mathbf{P}_{\mathbf{controlled}} = \begin{bmatrix} \end{bmatrix}$	215	215	215	$1/3$ of $P_{uncontrolled}$ (non-sprinkling season) + watering days
$E_{ext} = $	4.8	1.2	0.1	lb/VMT Uncontrolled
$E_{ext} =$	2.9	0,8	0.08	lb/VMT Controlled



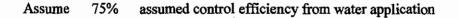
SUMMARY OF CONTROLLED EMISSIONS

	. ·]	Pounds/yea	r	Tons/year			
	PM ₃₀ .	PM ₁₀	PM _{2.5}	PM ₃₀	PM ₁₀	PM _{2.5}	
Transfers							
Screening							
Storage Piles							
Vehicle Traffic							
Site Totals							
					· .		

	ling (from AP-42 13.2.4, "Aggregate Handling and Storage Piles", Equation 1, 11/2006
_ EF =	$k(0.0032)[(U/5)^{1.3}]/[(M/2)^{1.4}]$ where:
	PM ₃₀ PM ₁₀ PM _{2.5}
k =	
U= M=	103 mph (average wind speed for O'Hare through 2001 - NOAA)
EF =	The second s
•	112.8 ton/hr screening rated capacity (from FESOP renewal app.)
	9 maximum drop points in rail unload system to rock chute plus 2 drops for pad 11 maximum drop points in ship load system plus 2 drops for pad transfers
	Emissions = Amount Transfered * Material Handling EF * No. of Drop Points Control is by watering to maintain moisture at above-listed percentage
	Potential Emissions - unloading
	lb/hr
	ton/yr
	Potential Emissions - loading assumes blend of 25% reclaim & 75% vin
	lb/hr
	ton/yr
eening (fro	m AP-42, Crushed Stone Processing, Table 11.19.2-2, 08/2004)
· .	PM PM ₁₀ PM _{2.5}
	PM PM ₁₀ PM _{2.5} 0.0022 0.00074 0.000050 lb pollutant/ton screened (controlled)
FF —	
EF = EF =	
EF = EF =	
•	300 ton/hr screening rated capacity (from FESOP renewal app.)
•	
•	300 ton/hr screening rated capacity (from FESOP renewal app.)
•	300 ton/hr screening rated capacity (from FESOP renewal app.) Emissions = Amount screened * Screening EF
•	300 ton/hr screening rated capacity (from FESOP renewal app.) Emissions = Amount screened * Screening EF Controlled emissions are those with material moisture content of at least 2.88 %
•	300ton/hr screening rated capacity (from FESOP renewal app.)Emissions = Amount screened * Screening EF Controlled emissions are those with material moisture content of at least 2.88 % (see footnote b to AP42 Table 11.19.2-2)
•	300ton/hr screening rated capacity (from FESOP renewal app.)Emissions = Amount screened * Screening EF Controlled emissions are those with material moisture content of at least 2.88 % (see footnote b to AP42 Table 11.19.2-2)



	PM ₃₀	PM₁₀	PM _{2.5}	_
EF =	0.10	0.04	0.01	controlled
EF ==	0.38	0.18	0.03	uncontrolled
	0	% of storage	piles that a	re inactive



Potential Controlled Emissions

 , 	lb/hr ton/yr	
	Potential Uncontrolled Emissions	· · ·
	lb/hr ton/yr	

Vehicle Traffic 4.

Unpaved Roads (AP-42 Section 13.2.2 Unpaved Roads, 2003) Applicable for 90% of vehicle traffic (estimate)

....

 $EF = k(s/12)^{a*}(W/3)^{b*}[(365-P)/365]$ lb/vehicle mile traveled (VMT)

2,628,000 tons/yr maximum screener throughput

W=

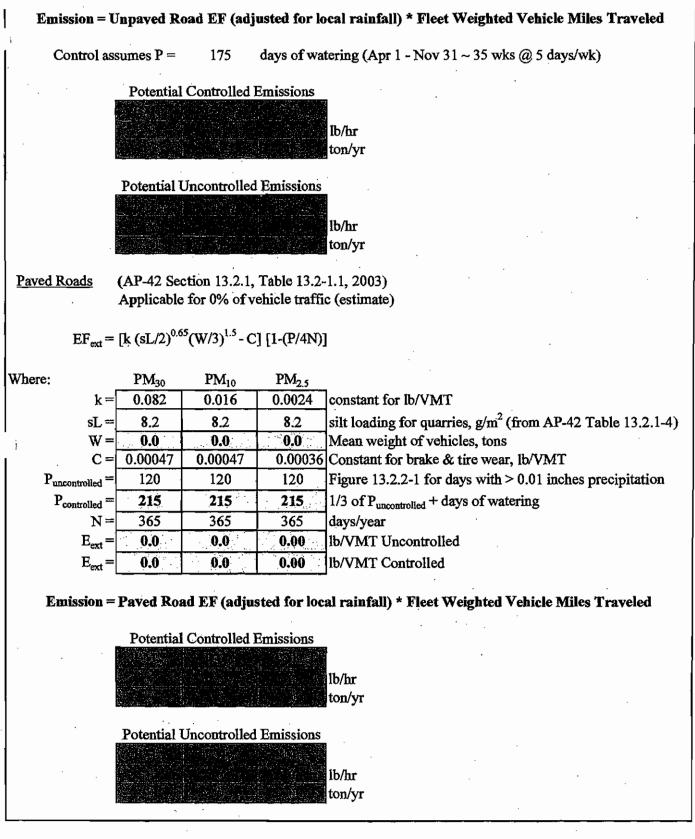
Mean Vehicle Fleet Weight for all vehicle types $\sum (VMT * avg vehicle wt)$ Total VMT

					Operating			VMT	
		W	eight (tons)) 	Distance ¹	Speed	Time	Unpave d	Paved
Vehicle Type	Number	Loaded	Empty	Average	(mi)	(mi/hr)	(hrs/yr)	(mi/yr)	(mi/yr)
End loader/dozer	1	20.0	10.0	15.0	0.03			7,466	0
Water truck ²	· 1	20.0	5.0	12.5		5.0	52	260	0
Haul truck	105,120	40.0	15.0	27.5	0.8			84,096	0
¹ round trip							Total =	91,822	0

²50 fills/year @ 1 hr each

V

Where:	PM_{30}	PM ₁₀	PM _{2.5}	• .
k =	4.9	1.5	0.15	constant for lb/VMT
a ==	0.7	0:9	0.9	
b =	0.45	0.45	0.45	
s =	5.1	5.1	5.1	road surface % silt (AP-42 Table 13.2.2.1 for Plant Road)
W =	26.4	26.4	26.4	Mean weight of vehicles, tons
$\mathbf{P}_{uncontrolled} =$	120	120	120	Figure 13.2.2-1 for days with > 0.01 inches precipitation
$\mathbf{P}_{\text{controlled}} =$	215	215	215	1/3 of Puncontrolled (non-sprinkling season) + watering days
$E_{ext} =$	4.8	1.2	0.1	lb/VMT Uncontrolled
$E_{ext} =$	2.9	0.8	0.08	lb/VMT Controlled
)		,		



}

SUMMARY OF CONTROLLED EMISSIONS

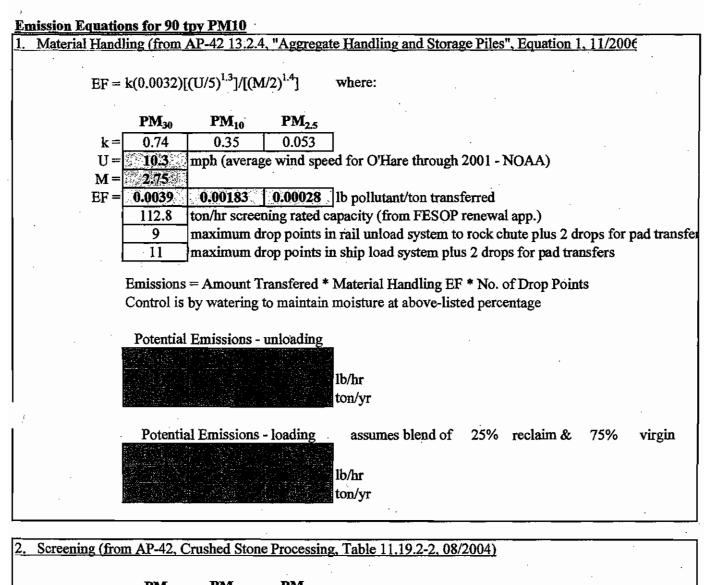
		Pounds/yea	r .		Tons/year				
	PM ₃₀	PM_{10}	PM _{2.5}	PM ₃₀	PM ₁₀	PM _{2.5}			
Transfers									
Screening									
Storage Piles									
Vehicle Traffic									
Citta Tratal	s second								

. .

. 1 · · ·

╗

· · ·



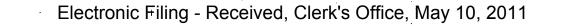
PM PM_{10} $PM_{2.5}$ EF =0.00220.000740.000050EF =0.0250.00870.00013Ib pollutant/ton screened (uncontrolled)300ton/hr screening rated capacity (from FESOP renewal app.)

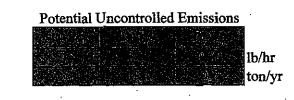
Emissions = Amount screened * Screening EF Controlled emissions are those with material moisture content of at least 2.88 %

(see footnote b to AP42 Table 11.19.2-2)

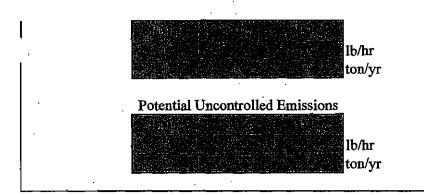
Potential Controlled Emissions

lb/hr ton/yr





3. Storage Piles (AP-42, Chapter 11.9, Western Surface Coal Mining, 1998) Note: k factors not available for PM₁₀ & PM_{2.5}, so the ratio of Material Handling k factors from Scenario 1 is applied Area acres of total available storage Active Piles (from AP-42, Table 11.9-1) EF = 0.72* u lb PM_{30} /acre/hr (disturbed area) U = 10.3 mph (average wind speed for Duluth for reporting year - NOAA) % of storage piles that are active 100 **PM**₃₀ **PM**₁₀ PM_{2.5} EF: 1.85 0.88 0.13 lb pollutant/acre/hr (controlled) EF: 7.42 3.51 0.53 lb pollutant/acre/hr (uncontrolled) assumed control efficiency from water application Assume .75% Potential Controlled Emissions lb/hr ton/yr Potential Uncontrolled Emissions lb/hr ton/yr Inactive Piles (from AP-42, Table 11.9-4) EF =ton PM/acre/yr (undisturbed area) 0.38 PM_{2.5} PM₃₀ **PM**₁₀ EF = 0.10 0.04 0.01 controlled **EF** = 0.38 0.18 0.03 uncontrolled % of storage piles that are inactive 0 75% assumed control efficiency from water application Assume Potential Controlled Emissions



4. Vehicle Traffic

Unpaved Roads (AP-42 Section 13.2.2 Unpaved Roads, 2003) Applicable for 90% of vehicle traffic (estimate)

 $EF = k(s/12)^{a} (W/3)^{b} [(365-P)/365]$ lb/vehicle mile traveled (VMT)

2,628,000 tons/yr maximum screener throughput

 $W = \sum (VMT * avg vehicle wt)$ Total VMT

icle wt) Mean Vehicle Fleet Weight for all vehicle types

· · ·						Operatin	y .	VI	T
)		W	eight (tons)	Distance ¹	Speed	Time	Unpave d	Paved	
Vehicle Type	Number	Loaded	Empty	Average	(mi)	(mi/hr)	(hrs/yr)	(mi/yr)	(mi/yr)
End loader/dozer	1	20.0	10.0	15.0	0.03		_	7,466	0
Water truck ²	1	20.0	5.0	12.5		5.0	52	260	0
Haul truck	105,120	40.0	15.0	27.5	0.8			84,096	0
¹ round trip							Total =	91,822	0

²50 fills/year (a) 1 hr each

Where:	PM ₃₀	\mathbf{PM}_{10}	PM _{2.5}	
k =	4.9	1.5	0.15	constant for lb/VMT
a=	0.7	0.9	0.9	
b=	0.45	0.45	0.45	
s =	5.1	5.1	5.1	road surface % silt (AP-42 Table 13.2.2.1 for Plant Road)
W=	26.4	26.4	26.4	Mean weight of vehicles, tons
$P_{uncontrolled} =$	120	120	120	Figure 13.2.2-1 for days with > 0.01 inches precipitation
P _{controlled} =	215	215	215	1/3 of P _{uncontrolled} (non-sprinkling season) + watering days
E _{ext} =	4.8	1.2	0.1	lb/VMT Uncontrolled
$E_{ext} =$	2.9	0.8	0.08	lb/VMT Controlled

.

	,			
Control as	sumes P =	175	days of wa	tering (Apr 1 - Nov 31 ~ 35 wks @ 5 days/wk)
	Potential	Controlled	Emissions	_
				lb/hr ton/yr
••••	References -	<u>14 - 17 - 18 - 18 - 18 - 18 - 18 - 18 - 18</u>	<u>Aler de la compo</u>	(01/ y1
	Potential	Uncontrolled	l Emissions	
				lb/hr ton/yr
			efet <u>ert i di Mad</u> deel	
Paved Roads	•	ction 13.2.1,		
	Applicable	e for 0% of v	ehicle traffi	c (estimate)
- זיק	The Car 100.0	⁵⁵ (W/3) ^{1.5} - C	יז וֹז רַע<i>ו</i>ו וּי	1
Er _{ext} =	[K (SL/2)	(w/3) -C	/] [1-(F /41 N)	J
here:	PM30	PM ₁₀	PM _{2.5}	
k =		0.016	0.0024	constant for lb/VMT
sL=	8.2	8.2	8.2	silt loading for quarries, g/m ² (from AP-42 Table 13.2.1-
W=		0.0	0.0	Mean weight of vehicles, tons
C=		0.00047		Constant for brake & tire wear, lb/VMT
P _{uncontrolled} =	120	120	120	Figure 13.2.2-1 for days with > 0.01 inches precipitation
$P_{controlled} =$ N =	215 365	215 365	215 365	1/3 of P _{uncontrolled} + days of watering days/year
$E_{ext} =$		0.0	0.00	lb/VMT Uncontrolled
$E_{ext} =$	0.0	0.0	0.00	lb/VMT Controlled
U.L.			· · ·	
Emission =	Paved Ro	ad EF (adju	sted for loc	al rainfall) * Fleet Weighted Vehicle Miles Traveled
	Dotontia	Controlled	Emissions	
	Potentia	Controlled	Emissions	
	的 网络拉拉特 特别 人名马马		요즘 것은 것은 바람이다. 같은 것은 것은 것은 것을 같이 같이 같이 같이 같이 없다.	lb/hr
			at the second	
				ton/yr
	Potential	Uncontrolled	Emissions	
	Potential	Uncontrolled	<u>l Emissions</u>	ton/yr
	Potential	Uncontrolled	<u>l Emissions</u>	

1

٦

SUMMARY OF CONTROLLED EMISSIONS

	Pounds/year			Tons/year			
	PM ₃₀	PM ₁₀	PM _{2.5}	PM30	PM ₁₀	PM _{2.5}	
Transfers							
Screening					i fra el constante de Astro guardo de la		
Storage Piles							
Vehicle Traffic						1	
Site Totals							

, ,

Illinois Environmental Protection Agency Public Notice Order Form

Division: Air Permits

Ordered By: Bradley Frost

Phone: 217/782-7027

Public Notice Number: FR10 - 009

Newspaper or location where ad is to be placed: Southtown Star

Run Date(s): 6/16/2010

Special Instructions:

Ad is to run as an ROP Display - NOT as a legal notice

Please typeset and border ad copy.

Ad Size: 2 x 4

Authorizing Name: Brad Frost

Date: June 9, 2010



1

к:00272

Illinois Environmental Protection Agency

Public Notice of the Proposed Renewal of the Federally Enforceable State Operating Permit for KCBX Terminals Company in Chicago

KCBX Terminals Company has requested that the Illinois Environmental Protection Agency renew the federally enforceable state operating permit (FESOP) regulating the air emissions from its bulk materials terminal located at 3259 East 100th Street in Chicago. The Illinois EPA has reviewed the application and made a <u>preliminary</u> determination that the application meets the standards for issuance and has prepared a draft permit for public' review and comment.

The Illinois EPA is accepting written comments on the draft permit. Comments must be postmarked by midnight and 16, 2010. If sufficient interest is expressed in the draft permit, a hearing may be held. Requests for information, comments, and questions should be directed to Brad Frost, Division of Air Pollution Control, Illinois Environmental Protection Agency, PO. Box 19506, Springfield, Illinois, 62794-9506, phone 217/782-2113, TDD phone number 217/782-9143.

. (

Persons wanting more information may obtain copies of the draft permit and project summary at <u>http://www.epa.gov/reg5oair/permits/ilonline.html</u>. The repositories for these documents and the application are at the Illinois EPA's offices at 9511 West Harrison in Des Plaines, 847/294-4000 and 1340 North Ninth St., Springfield, 217/782-7027 (please call ahead to assure that someone will be available to assist you). Copies of the documents will be made available upon request.

The 1990 amendments to the Clean Air Act require potentially major sources of air emissions to obtain federally enforceable operating permits. A FESOP permit allows a source that is potentially major to take operational limits in the permit so that it is a nonmajor source. The permit will contain federally enforceable limitations that restrict the facility's emissions to non-major levels. The permit will be enforceable by the USEPA, as well as the Illinois EPA.

DRAFT

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT - RENEWAL

PERMITTEE

KCBX Terminals Co. Attn: Chris Bailey 3259 East 100th Street Chicago, Illinois 60617

Application No.: 95050167I.D. No.: 031600AHIApplicant's Designation: REV10/07Date Received: January 31, 2005Subject: Bulk Materials TerminalDate Issued:Date Issued:Expiration Date:Location: 3259 East 100th Street, Chicago, Cook County, 60617

This permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of a bulk materials terminal [including two (2) portable conveyers], two (2) 560 Hp diesel-powered generators and fuel combustion units pursuant to the abovereferenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for Carbon Monoxide (CO), Nitrogen Oxides (NO_x), Particulate Matter with an aerodynamic diameter less than or equal to 10 micrometers (PM_{10}), and 100 tons/year for Sulfur Dioxide (SO_2)). As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permit(s) for this location.
- 2a. Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.
- b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such

Page 2

. 1

opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the emission source.

- d. Pursuant to 35 Ill. Adm. Code 212.304(a), all storage piles of materials with uncontrolled emissions of fugitive particulate matter in excess of 50 tons/year shall be protected by a cover or sprayed with a surfactant solution or water on a regular basis, as needed, or treated by an equivalent method, in accordance with the operating program required by 35 Ill. Adm. Code 212.309, 212.310, and 212.312.
- e. Pursuant to 35 Ill. Adm. Code 212.305, all conveyor loading operations to storage piles specified in 35 Ill. Adm. Code 212.304 shall utilize spray systems, telescopic chutes, stone ladders or equivalent methods in accordance with the operating program required by 35 Ill. Adm. Code 212.309, 212.310, and 212.312.
- f. Pursuant to 35 Ill. Adm. Code 212.306, all normal traffic pattern access areas surrounding storage piles specified in 35 Ill. Adm. Code 212.304 shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by 35 Ill. Adm. Code 212.309, 212.310, and 212.312.
- g. Pursuant to 35 Ill. Adm. Code 212.307, all unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods.
- h. Pursuant to 35 Ill. Adm. Code 212.308, crushers, grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, storage bins and fine product truck and railcar loading operations shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with an operating program.
 - i. Conveyor loadout to trucks and railcars shall be conducted with sleeves extending to at least 6 inches below the sides and the receiving vehicle, except for topping off.
 - ii. Conveyor loadout sleeves shall be inspected for proper operation while such loadout to trucks or railcars is occurring, at least once each week when such loadout to trucks or railcars is performed.

Page 3

- i. Pursuant to 35 Ill, Adm. Code 212.309(a), the emission units described in 35 Ill. Adm. Code 212.304 through 212.308 shall be operated under the provisions of an operating program, consistent with the requirements set forth in 35 Ill. Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.
- j. Pursuant to 35 Ill. Adm. Code 212.310, as a minimum the operating program shall include the following:
 - i. The name and address of the source;
 - ii. The name and address of the owner or operator responsible for execution of the operating program;
 - iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;
 - iv. Location of unloading and transporting operations with pollution control equipment;
 - v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212 Subpart K, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;
 - vi. Estimated frequency of application of dust suppressants by location of materials; and
 - vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.
- k. Pursuant to 35 Ill. Adm. Code 212.312, the operating program shall be amended from time to time by the owner or operator so that the operating program is current. Such amendments shall be consistent with 35 Ill. Adm. Code 212 Subpart K and shall be submitted to the Illinois EPA for its review.
- 1. Pursuant to 35 Ill. Adm. Code 212.313, if particulate collection equipment is operated pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 212.312 (i.e., to control bucket elevators, conveyor transfer points, conveyors, storage bins and fine product truck and railcar loading operations), emissions from such equipment shall not exceed 68 mg/dscm (0.03 gr/dscf).
- m. Pursuant to 35 Ill. Adm. Code 212.316(b), no person shall cause or allow fugitive particulate matter emissions generated from crushing,

Page 4

screening of slag, stone, coke or coal to exceed an opacity of 10 percent.

Pursuant to 35 Ill. Adm. Code 212.316(c), no person shall cause or n, allow fugitive particulate matter emissions from any roadway or parking area to exceed an opacity of 10 percent, except that the opacity shall not exceed 5 percent at quarries with a capacity to produce more than 1 million T/year of aggregate.

- Pursuant to 35 Ill. Adm. Code 212.316(d), no person shall cause or ο. allow fugitive particulate matter emissions from any storage pile to exceed an opacity of 10 percent, to be measured four feet from the pile surface.
- Pursuant to 35 Ill. Adm. Code 212.316(f), unless an emission unit has p. been assigned a particulate matter, PM10, or fugitive particulate matter emissions limitation elsewhere in 35 Ill. Adm. Code 212.316 or in 35 Ill. Adm. Code Fart 212 Subparts R or S, no person shall cause or allow fugitive particulate matter emissions from any emission unit to exceed an opacity of 20 percent.

q. Pursuant to 35 Ill. Adm. Code 212.321(a), no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

r. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined by using the equation:

 $E = A(P)^B$

where

P = Process weight rate; and E = Allowable emission rate; and,

i. Up to process weight rates of 408 MG/hour (450 T/hour):

P Mg/hr T/hr	
E kg/hr lbs/hr	
A 1.214 2.54	
B 0.534 0.534	-

ii. For process weight rate greater than or equal to 408 Mg/hour (450 T/hour):

Page 5

	Metric	English		
Р	Mg/hr	T/hr		
E	kg/hr	lbs/hr		
А	11.42	24.8		
в	0.16	0.16		

- Pursuant to 35 Ill. Adm. Code 212.700(a), 35 Ill. Adm. Code 212 Subpart в. U (Additional Control Measures) shall apply to those sources in the areas designated in and subject to 35 Ill. Adm. Code 212.324 (a) (1) or 212.423 (a) and that have actual annual source-wide emissions of PM10 of at least fifteen (15) tons per year.
- Pursuant to 35 Ill. Adm. Code 212.324(b), emissions of particulate t. matter with an aerodynamic diameter less than or equal to 10 micrometers (PM10) from any process emission unit shall not exceed 0.03 gr/scf during any one hour period.
- Pursuant to 35 Ill. Adm. Code 214.122(b)(2), no person shall cause or 4a. allow the emission of sulfur dioxide into the atmosphere in any one hour period from any new fuel combustion source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hour), burning liquid fuel exclusively to exceed 0.46 kg of sulfur dioxide per MW-hour of actual heat input when distillate fuel oil is burned (0.3 lbs/mmBtu).
- ь Pursuant to 35 Ill. Adm. Code 214.301, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to excess 2000 ppm.
- Pursuant to 35 Ill. Adm. Code 214.304, the emissions from the burning c. of fuel at process emission sources located in the Chicago or St. Louis (Illinois) major metropolitan areas shall comply with applicable Subparts B through F (i.e., 35 Ill. Adm. Code 214.122(b)).
- This permit is issued based on the two electric conveyors constructed 5. pursuant to permit 07100090 not being subject to the New Source Performance Standards (NSPS) for Coal Preparation Plants, 40 CFR 60 Subpart Y because the conveyors will not be used to convey coal to machinery at the coal preparation plant.
- This permit is issued based on this source not being a participating 6a. source in the Emissions Reduction Market System (ERMS), 35 Ill. Adm. Code Part 205, pursuant to 35 Ill. Adm. Code 205.200. This is based on the source's actual VOM emissions during the seasonal allotment period from May 1 through September 30 of each year being less than 10 tons and the source's baseline emissions also being less than 10 tons.
- In the event that the source's VOM emissions during the seasonal ь. allotment period equal or exceed 10 tons, the source shall become a participating source in the ERMS and shall comply with 35 Ill. Adm. Code Part 205, by holding allotment trading units (ATUs) for its VOM emissions during each seasonal allotment period, unless the source obtains exemption from the ERMS by operating with seasonal VOM

Page 6

emissions of no more than 15 tons pursuant to a limitation applied for and established in a Clean Air Act Permit Program (CAAPP) permit or a Federally Enforceable State Operating Permit (FESOP).

c. Pursuant to 35 Ill. Adm. Code 205.316(a), any participating or new participating source shall not operate without a CAAPP permit or FESOP. Pursuant to 35 Ill. Adm. Code 205.316(a)(2), if a participating or new participating source does not have a CAAPP permit containing ERMS provisions and the source elects to obtain a permit other than a CAAPP permit, the source shall apply for and obtain a FESOP that contains, in addition to other necessary provisions, federally enforceable ERMS provisions, including baseline emissions, allotment for each seasonal allotment period, identification of any units deemed to be insignificant activities for purposes of the ERMS, emissions calculation methodologies, and provisions addressing all other applicable requirements of 35 Ill. Adm. Code Part 205.

- 7a. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hour (25 mph). Determination of wind speed for the purposes of this rule shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to this rule is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.
- b. Pursuant to 35 Ill. Adm. Code 212.324(d), the mass emission limits contained in 35 Ill. Adm. Code 212.324(b) shall not apply to those emission units with no visible emissions other than fugitive particulate matter; however, if a stack test is performed, 35 Ill. Adm. Code 212.324(d) is not a defense finding of a violation of the mass emission limits contained in 35 Ill. Adm. Code 212.324(b).
- 8a. Pursuant to 35 Ill Adm. Code 212.324(f), for any process emission unit subject to 35 Ill. Adm. Code 212.324(a), the owner or operator shall maintain and repair all air pollution control equipment in a manner that assures that the emission limits and standards in 35 Ill. Adm. Code 212.324 shall be met at all times. 35 Ill. Adm. Code 212.324 shall not affect the applicability of 35 Ill. Adm. Code 201.149. Proper maintenance shall include the following minimum requirements:

i. Visual inspections of air pollution control equipment;

ii. Maintenance of an adequate inventory of spare parts; and

iii. Expeditious repairs, unless the emission unit is shutdown.

b. Pursuant to 35 Ill. Adm. Code 212.701(a), those sources subject to 35 Ill. Adm. Code 212 Subpart U shall prepare contingency measure plans reflecting the PM₁₀ emission reductions set forth in 35 Ill. Adm. Code

Page 7

212.703. These plans shall become federally enforceable permit conditions. Such plans shall be submitted to the Illinois EPA by November 15, 1994. Notwithstanding the foregoing, sources that become subject to the provisions of 35 Ill. Adm. Code 212 Subpart U after July 1, 1994, shall submit a contingency measure plan to the Illinois EPA for review and approval within ninety (90) days after the date such source or sources became subject to the provisions of 35 Ill. Adm. Code 212 Subpart U or by November 15, 1994, whichever is later. The Illinois EPA shall notify those sources requiring contingency measure plans, based on the Illinois EPA's current information; however, the Illinois EPA's failure to notify any source of its requirement to submit contingency measure plans shall not be a defense to a violation of 35 Ill. Adm. Code 212 Subpart U and shall not relieve the source of its obligation to timely submit a contingency measure plan.

c. Pursuant to 35 Ill. Adm. Code 212.703(a), all sources subject to 35 Ill. Adm. Code 212 Subpart U shall submit a contingency measure plan. The contingency measure plan shall contain two levels of control measures:

- Level I measures are measures that will reduce total actual annual source-wide fugitive emissions of PM₁₀ subject to control under 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 by at least 15%.
- ii. Level II measures are measures that will reduce total actual annual source-wide fugitive emissions of PM_{10} subject to control under 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 by at least 25%.
- d. Pursuant to 35 Ill. Adm. Code 212.703 (b), a source may comply with 35 Ill. Adm. Code 212 Subpart U through an alternative compliance plan that provides for reductions in emissions equal to the level of reduction of fugitive emissions as required at 35 Ill. Adm. Code 212.703 (a) and which has been approved by the Illinois EPA and USEPA as federally enforceable permit conditions. If a source elects to include controls on process emission units, fuel combustion emission units, or other fugitive emissions of PM_{10} not subject to 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316 (a) through (e), 212.424 or 212.464 at the source in its alternative control plan, the plan must include a reasonable schedule for implementation of such controls, not to exceed two (2) years. This implementation schedule is subject to Illinois EPA review and approval.
- e. Pursuant to 35 Ill. Adm. Code 212.704(b), if there is a violation of the ambient air quality standard for PM_{10} as determined in accordance with 40 CFR Part 50, Appendix K, the Illinois EPA shall notify the source or sources the Illinois EPA has identified as likely to be causing or contributing to one or more of the exceedences leading to such violation, and such source or sources shall implement Level I or Level II measures, as determined pursuant to 35 Ill. Adm. Code 212.704(e). The source or sources so identified shall implement such

Page 8

measures corresponding to fugitive emissions within ninety (90) days after receipt of a notification and shall implement such measures corresponding to any nonfugitive emissions according to the approved schedule set forth in such source's alternative control plan. Any source identified as causing or contributing to a violation of the ambient air quality standard for PM_{10} may appeal any finding of culpability by the Illinois EPA to the Illinois Pollution Control Board pursuant to 35 Ill. Adm. Code 106 Subpart J.

- f. Pursuant to 35 Ill. Adm. Code 212.704(e), the Illinois EPA shall require that sources comply with the Level I or Level II measures of their contingency measure plans, pursuant 35 Ill. Adm. Code 212.704(b), as follows:
 - Level I measures shall be required when the design value of a violation of the 24-hour ambient air quality standard, as computed pursuant to 40 CFR 50, Appendix K, is less than or equal to 170 ug/m³.

ii. Level II measures shall be required when the design value of a violation of the 24-hour ambient air quality standard, as computed pursuant to 40 CFR 50, Appendix K, exceeds 170 ug/m³.

- 9a. The moisture content of the bulk material handled by the source shall be at least 1.3% by weight. The Permittee shall show compliance with this requirement by recording the moisture content of the bulk material received at the source as provided by the supplier of the feed material. If moisture content falls below 3.0% by weight as documented by the supplier, then the Permittee shall:
 - i. Utilize water sprays on the material handling operations (e.g., material transfer, screening and crushing) associated with bulk materials having a moisture content below 3.0% by weight to reduce particulate matter emissions and to maintain compliance with the applicable visible emissions standards for each affected material handling operation; or
 - ii. Follow the testing requirements of Condition 9(c).
- b. If the Permittee relies on Condition 9(a)(i) to demonstrate compliance with Condition 9(a), the Permittee shall monitor the water spray equipment as follows during non-freezing conditions:
 - i. The water supply to the spray equipment shall be equipped with a master metering device used to determine water usage for the control of particulate matter emissions.
 - ii. Inspections of water spray equipment and operation (such as leaking, maintaining adequate flow, clogging of flow lines, etc.) shall be performed at least once per week when the material handling operations are in operation.

Page 9

- c. If the Permittee relies on Condition 9(a)(ii) to demonstrate compliance with Condition 9(a), the Permittee shall measure the moisture content of a representative sample of the bulk material having a moisture content below 3.0% as provided by the supplier, at least once per week, when water spray is not being utilized, using ASTM Procedure D 3302 for coal and ASTM Procedure D 3172 and D 4931 for petroleum coke. Should three consecutive tests at the source show moisture contents of 3.0% or greater by weight, this testing shall no longer be required for the subject bulk material.
- d. The diesel-powered generators shall only be operated with distillate fuel oil as the fuel. The use of any other fuel in the diesel-powered generators requires that the Permittee first obtain a construction permit from the Illinois EPA and then perform stack testing to verify compliance with all applicable requirements.
- e. The Permittee shall not keep, store or use distillate fuel oil (Grades No. 1 and 2) at this source with a sulfur content greater than the larger of the following two values:

i. 0.28 weight percent, or

- ii. The wt. percent given by the formula: Maximum wt. percent sulfur = (0.00015) x (Gross heating value of oil, Btu/lb).
- f. Organic liquid by-products or waste materials shall not be used in any emission unit at this source without written approval from the Illinois EPA.
- g. The Illinois EPA shall be allowed to sample all fuels stored at the above location.
- 10a. The emissions from and the operation of all activities at source shall not exceed the following limits:

PM_{10}	Emission	•	PM	emissions
Tons/Week	Tons/Year		Tons/Week	Tons/Year
2.38	95		2.38	95

These limits are based on the maximum amount of material handled and standard emission factors (Table 11.19.2-2, AF-42, Volume I, Fifth Edition, Update 2004, August 2004 and Section 13.2.4, AF-42, Volume I, Fifth Edition, November 2006). PM₁₀ and PM emissions shall be calculated and recorded using the equation:

 $E = [(T \times F_m) + (S \times F_g) + (C \times F_c) + (F1 \times V1 \times F3) + (F2 \times V2 \times F4)]/2000$

Where:

 $E = Total PM_{10}$ or PM emissions, (tons);

T = Amount of bulk material transferred, (tons);

Page	10
•	$F_{m} = (k * 0.0032 * N) * [((U/5)1.3) / ((M/2)1.4)];$
•	Where: k = 0.35 for PM ₁₀ ; = 0.74 for PM;
	U = mean wind speed, (miles/hour);
	M = material moisture content, (%);
	N = Number of material drop points;
	S = Amount of bulk material Screened, (tons);
	$F_s = 0.0022$ lb PM/ton; = 0.00074 lb PM ₁₀ /ton;
	C = tons of bulk material Crushed, (tons);
	$F_c = 0.0012 \text{ lb } PM/ton;$ = 0.00054 lb $PM_{10}/ton;$
·	F1 = Gallons of gasoline used (gal);
	F2 = Gallons of diesel plus kerosene use;
	F3 = 0.1 lb/mmBtu for gasoline;
·	F4 = 0.31 lb/mmBtu for diesel/kerosene;
	VI = 0.13 mmBtu/gallon of gasoline; and
	V2 = 0.137 mmBtu/gallon of diesel*.
	*The conversion for gallons in mmBtu for diesel conservatively includes kerosene since the heat content of kerosene is slightly lower than diesel.
b.	Emissions and operation of the two diesel-powered generators, small non-mobile engines and portable heaters at the source shall not exceed the following limits:
	Emissions
	Pollutant Ton/Veek Ton/Vear

		•	Emissions		
Pollutant	•	<u>Ton/We</u>	ek Ton/	Year	
Carbon Monoxide (CO)		2.38	95	.0	
Nitrogen Oxides (NOx)		2.38	95	. 0	
Sulfur Dioxide (SO2)		1.67	66	.8	
Volatile Organic Material ((VOM)	0.63	25	.0 .	

The emissions from the diesel-powered generators are based on standard emission factors (Tables 3.3-1 and 3.4-1, AP-42, Fifth Edition, Volume

Page 11

I, Supplement B, October 1996). Emissions from the generators shall be calculated as follows:

$E = H \times F / 2,000$

Where: E = Total emissions of pollutant;

H = Hours of operation of unit (hours);

F = Emission Factor as follows:

	Emission	Factors
	Gasoline	Large Stationary
	Industrial Engines	Diesel Engines
Pollutant	lbs/Hp-Hr	lbs/Hp-Hr
Carbon Monoxide (CO)	0.00696	0.0055
Nitrogen Oxides (NO _x)	0.011	0.024
Sulfur Dioxide (SO ₂)	0.000591	0.00809 x S*
Volatile Organic Material (VOM)	0.0216	0.00064
-	•	

S = Wt. % sulfur in fuel

- c. Compliance with the annual limits of this permit shall be determined on a weekly basis from the sum of the data for the current week plus the preceding 51 weeks (running 52 week total).
- 11a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:
 - i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.
 - ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the

Page 12

emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

- b. Testing required by Condition 12 shall be performed upon a written request from the Illinois EPA by a qualified individual or independent testing service.
- 12. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.
- 13a. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.
 - b. i. Pursuant to 35 Ill. Adm. Code 212.316(g)(1), the owner or operator of any fugitive particulate matter emission unit subject to 35 Ill. Adm. Code 212.316 shall keep written records of the application of control measures as may be needed for compliance with the opacity limitations of 35 Ill. Adm. Code 212.316 and shall submit to the Illinois EPA an annual report containing a summary of such information.
 - ii. Pursuant to 35 Ill. Adm. Code 212.316(g)(2), the records required under 35 Ill. Adm. Code 212.316(g) shall include at least the following:
 - A. The name and address of the source;
 - B. The name and address of the owner and/or operator of the source;
 - C. A map or diagram showing the location of all emission units controlled, including the location, identification, length, and width of roadways;

D. For application of physical or chemical control agents: the name of the agent, application rate and frequency, and total quantity of agent and, if diluted, percent of concentration, used each day; and

Page 13

E. A log recording incidents when control measures were not used and a statement of explanation.

iii. Pursuant to 35 Ill. Adm. Code 212.316(g)(3), the records required under 35 Ill. Adm. Code 212.316 shall be kept and maintained for at least three (3) years and shall be available for inspection and copying by Illinois EPA representatives during working hours.

- c. i. Pursuant to 35 Ill. Adm. Code 212.324(g)(1), written records of inventory and documentation of inspections, maintenance, and repairs of all air pollution control equipment shall be kept in accordance with 35 Ill. Adm. Code 212.324(f).
 - ii. Pursuant to 35 Ill. Adm. Code 212.324(g)(2), the owner or operator shall document any period during which any process emission unit was in operation when the air pollution control equipment was not in operation or was malfunctioning so as to cause an emissions level in excess of the emissions limitation. These records shall include documentation of causes for pollution control equipment not operating or such malfunction and shall state what corrective actions were taken and what repairs were made.
 - iii. Pursuant to 35 Ill. Adm. Code 212.324(g)(3), a written record of the inventory of all spare parts not readily available from local suppliers shall be kept and updated.

iv. Pursuant to 35 Ill. Adm. Code 212.324(g)(5), the records required under 35 Ill. Adm. Code 212.324 shall be kept and maintained for at least three (3) years and shall be available for inspection and copying by Illinois EPA representatives during working hours.

- 14a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
 - i. Records addressing use of good operating practices for the material handling operations at this source:
 - A. If the Permittee is relying on Conditions 9(a)(i) and 9(b) to demonstrate compliance with Condition 9(a), the Permittee shall maintain operating logs for the water spray equipment, including dates and hours of usage, total amount of water applied each month, malfunctions (type, dates, and measures to correct), dates of rainfall during the preceding 24 hours, and daily observations of bulk material conditions (wet or dry) and/or other controls as may be present (e.g., coverage by snow or ice);
 - B. If the Permittee is relying on the requirements of Conditions 9(a)(ii) and 9(c) to demonstrate compliance with Condition 9(a), the Permittee shall maintain records of all moisture content tests performed including date, time,

Page 14

individual or laboratory performing test, and location of sample (e.g., prior to crushing, stockpiles, etc.); and

C. The Permittee shall keep records of the moisture content of bulk materials as provided by the source of the feed material in accordance with Condition 9(c).

- ii. Records of the moisture content of bulk solid materials as provided by the suppliers of bulk solid materials, unless such records are superseded by moisture analysis from samples collected at the source;
- iii. Records of moisture analysis from samples collected at the source;
- iv. Name and total amount of each bulk material (e.g., coal, petroleum coke, etc.) processed (i.e., crushed, screened and transferred), tons/week and tons/year;
- v. Operating hours of each generator, hours/week and hours/year; and
- vi. Weekly and annual emissions of CO, NO_x , PM, PM_{10} , SO₂, and VOM from the source with supporting calculations (tons/week and tons/year).
- b. The Permittee shall maintain the following records to allow the confirmation of actual VOM emissions during the seasonal allotment period:
 - Records of operating data and other information for each individual emission unit or group of related emission units at the source, as appropriate, to determine actual VOM emissions during the seasonal allotment period;
 - ii. Records of the VOM emissions, in tons, during the seasonal allotment period, with supporting calculations, for each individual emission unit or group of related emission units at the source, determined in accordance with the procedures that may be specified in this permit; and
 - iii. Total VOM emissions from the source, in tons, during each seasonal allotment period, which shall be compiled by November 30 of each year.
- c. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source

Page 15

office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

15a. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

b. Pursuant to 35 Ill. Adm. Code 212.316(g) (5), a quarterly report shall be submitted to the Illinois EPA stating the following: the dates any necessary control measures were not implemented, a listing of those control measures, the reasons that the control measures were not implemented, and any corrective actions taken. This information includes, but is not limited to, those dates when controls were not applied based on a belief that application of such control measures would have been unreasonable given prevailing atmospheric conditions, which shall constitute a defense to the requirements of 35 Ill. Adm. Code 212.316. This report shall be submitted to the Illinois EPA thirty (30) calendar days from the end of a quarter. Quarters end March 31, June 30, September 30, and December 31.

c. i. Pursuant to 35 Ill. Adm. Code 212.324(g)(4), copies of all records required by 35 Ill. Adm. Code 212.324 shall be submitted to the Illinois EPA within ten (10) working days after a written request by the Illinois EPA.

- ii. Pursuant to 35 Ill. Adm. Code 212.324(g)(6), upon written request by the Illinois EPA, a report shall be submitted to the Illinois EPA for any period specified in the request stating the following: the dates during which any process emission unit was in operation when the air pollution control equipment was not in operation or was not operating properly, documentation of causes for pollution control equipment not operating or not operating properly, and a statement of what corrective actions were taken and what repairs were made.
- 20a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance or deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, a description of the exceedances or deviation, and efforts to reduce emissions and future occurrences.

b. Two (2) copies of required reports and notifications shall be sent to:

Page 16

Illinois Environmental Protection Agency Division of Air Pollution Control Compliance Section (#40) P.O. Box 19276 Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Date Signed:

Illinois Environmental Protection Agency Division of Air Pollution Control 9511 West Harrison Des Plaines, Illinois 60016

If you have any questions on this permit, please call George Kennedy at 217/782-2113.

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

ECB:GMK:jws

cc: Illinois EPA, FOS Region 1 Lotus Notes Page 17

Attachment A- Emission Summary

This attachment provides a summary of the maximum emissions from the source operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from the source. The resulting maximum emissions are below the levels, (e.g., 100 tons/year for CO, NO_x, PM_{10} , and SO₂) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that control measures are more effective than required in this permit.

EMISSIONS (Tons/Year)

Emission Unit	<u>co</u>	NOX	PM	<u>PM</u> 10	<u>SO</u> 2	VOM
Material Handling Activities Fuel Combustion	95.0	95.0	95.0	<u>95.0</u>	66.8	25 0
Totals	· · · · ·	95.0	95.0	95.0	66.8	$\frac{25.0}{25.0}$

GMK:jws

K:00290