OMB Control No:	xxxx-xxxx
Expiration Date:	xx/xx/xxxx

Did any of the responses (individual cells) you entered in this tab contain CBI?
If yes, be sure to shade the CBI-containing cells red and follow the instructions in section C of the survey overview document for submitting CBI.

Review Draft

UK = Unknown, **NA = Not Applicable**. See instruction document for details on use of these terms.
"Nominal daily throughput capacity" is defined as the typical operating rate for the emission unit.
Pulp and Paper sector facility data.

Instruction:	Provide for all entries. This should match NEI Site ID used in Part II of this survey (the NEI update). If no NEI Site ID exists for your facility in Part II, use a temporary ID of "NEW_____" where the blank is your facility's zip code.	Name of legal operator of facility	Complete street address of facility (physical location)					Provide mailing address if different than physical location					Facility contact able to answer technical questions about the con		
Survey reference:															
Field:	**NEI Site ID**	**Legal operator**	**Physical address**	**Physical city**	**Physical state**	**Physical zip**	**Physical county**	**Mail address**	**Mail city**	**Mail state**	**Mail zip**	**Mail county**	**Facility contact name**	**Facility contact title**	
Example entry:	99999	Gaint Corporation	1000 Plant Road	Anytown	VA	24553	Amherst	PO Box 123	Fairspring	VA	24554	Amherst	Joe Smith	Environmental Manager	
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															
25															
26															
27															
28															
29															
30															
31															
32															
33															
34															
35															
36															
37															
38															
39															
40															
41															
42															
43															
44															
45															
46															
47															
48															
49															
50															

OMB Control No:
Expiration Date:
Review Draft

UK = Unknown, **NA = Not Applica**
"Nominal daily throughput capacity"
Pulp and Paper sector facility da

Instruction:	npleted survey				If not the same as legal operator, provide name and address of legal owner of this facility				Dun and Bradstreet Number for the legal owner of this mill (see TRI Form R)	(Optional) Dun and Bradstreet Number for this mill (if the mill has its own Dun and Bradstreet Number)	If you operate a non-major source, follow the instructions in the survey overview document for notifying EPA to determine if you should complete this survey. See the 40 CFR part 63 subpart A definition of "major source" in the survey overview document Attachment 1.
Survey reference:											
Field:	**Facility contact phone**	**Facility contact ext**	**Facility contact fax**	**Facility contact email**	**Legal owner address**	**Legal owner city**	**Legal owner state**	**Legal owner zip**	**Dun Bradstreet owner**	**Dun Bradstreet mill**	**HAP size classification**
Example entry:	999-999-9999	456	999-999-8888	joe.smith@anymillusa.com	100 Corporate Blvd	Green Bay	WI	54304	9020777	149810921	major
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											
26											
27											
28											
29											
30											
31											
32											
33											
34											
35											
36											
37											
38											
39											
40											
41											
42											
43											
44											
45											
46											
47											
48											
49											
50											

OMB Control No:
Expiration Date:
Review Draft

UK = Unknown, **NA = Not Applic**
"Nominal daily throughput capacity"
Pulp and Paper sector facility da

Instruction:	The primary NAICS code represents the line of business that generates the most income for the facility.	Enter the approximate number of employees (worldwide) of the business enterprise that owns this facility, including where applicable, the parent company and all subsidiaries, branches, and unrelated establishments owned by the parent company. Please count full-time, part-time, and temporary employees equally.	Enter the number of facility employees (full-time, part-time, and temporary employees should be counted equally)	The small business size standards for NAICS 322 are based on number of employees of the parent company: 750 employees for NAICS 322110-322130, 322212, and 322215; and 500 employees for all other 322xxx NAICS. See also Attachment 2 of the Part I survey instructions.	Indicate "applies" for each federal NESHAP or NSPS that limits emissions or establishes requirements Mark "NA" if not applicable (or if the otherwise applicable Federal rule contains no specific requireme other standards list the subparts that apply. If in doubt, check your operating permit for Federal air r				
Survey reference:		Size of entity			Federal rule coverage				
Field:	**Primary NAICS**	**Worldwide employees**	**Facility employees**	**Small business**	**P&P NESHAP subpart S**	**Combustion Source NESHAP subpart MM**	**Paper/web coating NESHAP subpart JJJJ**	**Boiler NESHAP subpart DDDDD (or CISWI emission guidelines/NSPS) that are under development**	**Other NESHAP (list subparts)**
Example entry:	322121-Paper (except Newsprint) Mills	>1000	500-749	no	Applies	Applies	Applies	Applies	DDDD
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									
36									
37									
38									
39									
40									
41									
42									
43									
44									
45									
46									
47									
48									
49									
50									

OMB Control No:
Expiration Date:
Review Draft

UK = Unknown, **NA = Not Applica**
"Nominal daily throughput capacity"
Pulp and Paper sector facility da

Instruction:	; from any single piece of equipment at the mill. ents for the equipment types at your mill). For the rule subparts that apply.			Select yes/no	Select the most relevant response	Select yes/no	Select yes/no	Select from menu. You may write in more than once choice.	Enter number	Enter the 2009 nominal daily production capacity total for all market pulp products.	Select from menu
Survey reference:				Pulps					Pulp dryers	Market pulp	Bleaching (or brightening) systems
Field:	**Kraft NSPS subpart BB**	**Boiler NSPS**	**Other NSPS (list subparts)**	**Does the mill produce virgin pulp?**	**Does the mill produce pulp from secondary fiber?**	**Does the mill purchase virgin pulp?**	**Does the mill purchase secondary fiber pulp?**	**Types of market pulp produced by the mill**	**Total number of pulp dryers used to produce market pulp**	**2009 nominal daily market pulp production capacity (short tons/day)**	**Is bleaching or brightening performed at the mill?**
Example entry:	Applies	Db	NA	yes	no	no	no	NA	NA	NA	yes-bleaching
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											
26											
27											
28											
29											
30											
31											
32											
33											
34											
35											
36											
37											
38											
39											
40											
41											
42											
43											
44											
45											
46											
47											
48											
49											
50											

OMB Control No:
Expiration Date:
Review Draft

UK = Unknown, **NA = Not Applic**
"Nominal daily throughput capacity"
Pulp and Paper sector facility da

Instruction:	Enter number of machines	Enter the 2009 total nominal daily production capacity for all paper/paperboard products.	Enter decimal percent for utilization (e.g., 0.7 for 70% of capacity utilized). See survey instructions for an example.	Enter the typical decimal percent for utilization (e.g., 0.7 for 70% of capacity utilized) for the past 5 years. One way to determine the 5-year utilization would be to average the utilization percentages for 2005, 2006, 2007, 2008, and 2009.	Select from menu the general paper grades manufactured by the paper mill in 2009 (noting the product produced in the greatest quantity as product 1, product produced in the 2nd greatest quantity as product 2, etc.)	Use the paper grades most closely related to the paper grades produced at your mill if you do not find an exact match in the menu.	Specify other paper grade(s) if none of the grades in the menu reasonably match the grades produced at your mill		
Survey reference:	Paper or paperboard processes/products		Paper capacity utilization		Paper grades produced				
Field:	**Total number of paper machines**	**2009 nominal daily production capacity total for paper/paperboard (air dried short tons/day)**	**2009 paper/paperboard capacity utilization percentage**	**5-year average (2005-2009) paper/paperboard capacity utilization percentage**	**Paper grade 1**	**Paper grade 2**	**Paper grade 3**	**Paper grade 4**	**Paper grade 5**
Example entry:	1	340000	0.8	0.95	uncoated free sheet	linerboard	other - specialty food-grade		
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									
36									
37									
38									
39									
40									
41									
42									
43									
44									
45									
46									
47									
48									
49									
50									

OMB Control No:
Expiration Date:
Review Draft

UK = Unknown, **NA = Not Applic**
"Nominal daily throughput capacity"
Pulp and Paper sector facility da

Instruction: Optional. Enter any comments you have on the data supplied.

Survey reference:

Field:	Paper grade 6	Paper grade 7	Paper grade 8	Paper grade 9	Paper grade 10	Comments
Example entry:						
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						
48						
49						
50						

OMB Control No: xxxx-xxxx
Expiration Date: xx/xx/xxxx

Review scale

You may find it helpful to use Excel's "freeze panes" or "split" features when viewing this spreadsheet.
UK = Unknown. NA = Not Applicable. See instruction document for details on use of these terms.

Did any of the responses (individual cells) you entered in this tab contain CBI?
If yes, be sure to shade the CBI-containing cells red and follow the instructions in section C of the survey overview document for submitting CBI.

"Nominal daily throughput capacity" is defined as the typical operating rate for the emission unit. For example, pulp mill production can be used to approximate pulp mill equipment throughput capacity.

*You do not need to complete these columns for boilers if you included Boiler MACT survey codes.

Instruction:	Provide for all entries. This should match NEI Site ID used in Part II.	Provide for all entries. Use the Emission Unit ID in the NEI data set for your mill (supplied for Part II) if the individual emission unit is listed there. If emission units are aggregated by collection system in the NEI, then you would list each emission unit separately with a new Emission Unit ID in this tab. See the survey instruction document for more information on matching Emission Unit IDs to the NEI. Collection systems (identified with the Collection system ID), boilers, strippers, and thermal oxidizers must also be included in this column so air pollution controls and equipment details can be specified separately for these equipment. Note that in some cases the Emission Unit ID will be the same as a Collection system ID or APCD_ID. Supply information for combustion units that burn NCGs or SOGs in this *PI Equip detail* tab.	OPTIONAL (for boilers). Instead of entering certain boiler details in this spreadsheet, you may specify the ID numbers included in the Boiler MACT survey for your boilers. Use the Boiler MACT Code Lookup.xls spreadsheet provided with Part I to determine your Boiler MACT codes. Enter the Boiler MACT Facility ID	OPTIONAL (for boilers) Enter the Boiler MACT Unit ID	Leave columns that do not apply for a given emission unit blank. Specify the collection system if applicable. (Examples of collection systems include closed vent systems, LVHC, and HVLC systems.)	Enter the decimal value for control capture efficiency, if available (e.g., 0.90 = 90% capture). Blank entries for emission units with control devices will be considered as having 100% capture.	Enter the following codes for emission units that are not emitted through a conveyance such as a collection system or stack: NV = not vented; BLDG = vented into a building; FUGITIVE = fugitive emission source	Use this column for notes or if helpful to relate equipment and process lines to your permit, the NEI, or other information	Write in a description using the common equipment types listed in Attachment 1 of the survey instruction document.	(See boiler note*) Enter "UK" if unknown; or "pre-1990" if more than 20 years old and the install date is unknown. If the emission unit was substantially upgraded, enter the year of the upgrade as "XXXX-upgrade."	(See boiler note*) Enter 2009 operating hr/yr.	Enter the exhaust flow rate from the emission unit (if known) in actual cubic feet per minute (acfm). Leave blank for emission units not ducted through a conveyance (e.g., emission units not vented, vented into a building, or fugitive sources). Measured flow rates from stack tests are preferred (if available). Otherwise, provide an estimate or enter "UK" for unknown. If the emission unit listed in this row has multiple vents, the please enter the total flow from all vents combined and note in column O "multiple vents combined". See instruction document for details. If exhaust from the emission unit is combined with exhaust from other emission units, please indicate the emission units IDs in the next column with combined exhaust flow.	Enter the emission unit exhaust gas temperature in degrees Fahrenheit (if known)	Enter the emission unit exhaust gas moisture content (% H2O), if known. For example, enter "10" for 10%.	Exhaust flow rate measurements may have been performed through stack testing at the emission point after multiple exhaust streams have been combined. If exhaust from the emission unit is combined with exhaust from other emission units, please indicate the emission units IDs with combined exhaust flow. If the emission unit has multiple vents and the exhaust flow provided is the total from multiple combined vents, enter the "multiple vents combined" in this column.
Survey reference:	Equipment identification											Emission unit exhaust parameters (if emitted through a conveyance)*			
Field:	**NEI Site ID**	**Emission Unit ID**	**Boiler MACT Survey Facility ID**	**Boiler MACT Survey Unit ID**	**Collection system ID (for collection systems that collect gases from multiple process units prior to air pollution control).**	**Control Capture Efficiency (%)**	**Configuration if not emitted through a conveyance**	**Process notes (optional)**	**Emission unit description**	**Year emission unit installed**	**Emission unit operating hr/yr**	**Emission unit exhaust flow rate, acfm (if known)**	**Exhaust gas temperature, F (if known)**	**Exhaust gas moisture content, % (if known)**	**Emission units IDs (or Collection System IDs) with combined exhaust flow**
Example entry:	99999	DIG-1			LVHC-1				digester	pre-1990	8400	2,000	175	45	multiple vents combined
	99999	DIG-2			LVHC-1				digester	pre-1990	8430	1,200	200	50	multiple vents combined
	99999	STRIPPER						NEI Emission Unit ID = 06	steam stripper system	2000	8430	14,000	UK	UK	
	99999	LVHC-1							LVHC collection system	2000-upgrade	8370	14,000	UK	UK	
	99999	TO							thermal oxidizer (backup)	2000	390	11,000	300	8	
	99999	Boiler EUS5	VAGaintCorporationAnytown	EUS5				NEI Emission Unit ID = EUS5	boiler	1985	8700	56,000	250	12	
	99999	EVAP			LVHC-1				evaporator	UK	8430	UK	UK	UK	
	99999	GENERIC UNIT				0.85		NEI Emission Unit ID = GEN09	generic example row	UK	8430	18,000	150	7	

Field:	NEI Site ID	Emission Unit ID	Boiler MACT Survey Facility ID	Boiler MACT Survey Unit ID	Collection system ID (for collection systems that collect gases from multiple process units prior to air pollution control).	Control Capture Efficiency (%)	Configuration if not emitted through a conveyance	Process notes (optional)	Emission unit description	Year emission unit installed	Emission unit operating hr/yr	Emission unit exhaust flow rate, acfm (if known)	Exhaust gas temperature, F (if known)	Exhaust gas moisture content, % (if known)	Emission units IDs (or Collection System IDs) with combined exhaust flow
130															
131															
132															
133															
134															
135															
136															
137															
138															
139															
140															
141															
142															
143															
144															
145															
146															
147															
148															
149															
150															
151															
152															
153															
154															
155															
156															
157															
158															
159															
160															
161															
162															
163															
164															
165															
166															
167															
168															
169															
170															
171															
172															
173															
174															
175															
176															
177															
178															
179															
180															
181															
182															
183															
184															
185															
186															
187															
188															
189															
190															
191															
192															
193															
194															
195															
196															
197															
198															
199															
200															
201															
202															
203															
204															
205															
206															
207															
208															
209															
210															
211															
212															
213															
214															
215															
216															
217															
218															
219															
220															
221															
222															
223															
224															
225															
226															
227															
228															
229															
230															
231															
232															
233															
234															
235															
236															
237															
238															
239															
240															
241															
242															
243															
244															
245															
246															
247															
248															
249															
250															
251															
252															
253															
254															
255															
256															
257															
258															
259															
260															
261															
262															
263															
264															
265															
266															
267															
268															
269															
270															
271															
272															
273															
274															
275															
276															
277															
278															
279															
280															
281															
282															
283															
284															
285															
286															
287															
288															
289															
290															
291															
292															
293															
294															
295															
296															
297															
298															
299															
300															
301															

Field:	NEI Site ID	Emission Unit ID	Boiler MACT Survey Facility ID	Boiler MACT Survey Unit ID	Collection system ID (for collection systems that collect gases from multiple process units prior to air pollution control).	Control Capture Efficiency (%)	Configuration if not emitted through a conveyance	Process notes (optional)	Emission unit description	Year emission unit installed	Emission unit operating hr/yr	Emission unit exhaust flow rate, acfm (if known)	Exhaust gas temperature, F (if known)	Exhaust gas moisture content, % (if known)	Emission units IDs (or Collection System IDs) with combined exhaust flow
302															
303															
304															
305															
306															
307															
308															
309															
310															
311															
312															
313															
314															
315															
316															
317															
318															
319															
320															
321															
322															
323															
324															
325															
326															
327															
328															
329															
330															
331															
332															
333															
334															
335															
336															
337															
338															
339															
340															
341															
342															
343															
344															
345															
346															
347															
348															
349															
350															
351															
352															
353															
354															
355															
356															
357															
358															
359															
360															
361															
362															
363															
364															
365															
366															
367															
368															
369															
370															
371															
372															
373															
374															
375															
376															
377															
378															
379															
380															
381															
382															
383															
384															
385															
386															
387															
388															
389															
390															
391															
392															
393															
394															
395															
396															
397															
398															
399															
400															
401															
402															
403															
404															
405															
406															
407															
408															
409															
410															
411															
412															
413															
414															
415															
416															
417															
418															
419															
420															
421															
422															
423															
424															
425															
426															
427															
428															
429															
430															
431															
432															
433															
434															
435															
436															
437															
438															
439															
440															
441															
442															
443															
444															
445															
446															
447															
448															
449															
450															
451															
452															
453															
454															
455															
456															
457															
458															
459															
460															
461															
462															
463															
464															
465															
466															
467															
468															
469															
470															
471															
472															
473															

Field:	NEI Site ID	Emission Unit ID	Boiler MACT Survey Facility ID	Boiler MACT Survey Unit ID	Collection system ID (for collection systems that collect gases from multiple process units prior to air pollution control).	Control Capture Efficiency (%)	Configuration if not emitted through a conveyance	Process notes (optional)	Emission unit description	Year emission unit installed	Emission unit operating hr/yr	Emission unit exhaust flow rate, acfm (if known)	Exhaust gas temperature, F (if known)	Exhaust gas moisture content, % (if known)	Emission units IDs (or Collection System IDs) with combined exhaust flow
474															
475															
476															
477															
478															
479															
480															
481															
482															
483															
484															
485															
486															
487															
488															
489															
490															
491															
492															
493															
494															
495															
496															
497															
498															
499															
500															
501															
502															
503															
504															
505															
506															
507															
508															
509															
510															
511															
512															
513															
514															
515															
516															
517															
518															
519															
520															
521															
522															
523															
524															
525															
526															
527															
528															
529															
530															
531															
532															
533															
534															
535															
536															
537															
538															
539															
540															
541															
542															
543															
544															
545															
546															
547															
548															
549															
550															
551															
552															
553															
554															
555															
556															
557															
558															
559															
560															
561															
562															
563															
564															
565															
566															
567															
568															
569															
570															
571															
572															
573															
574															
575															
576															
577															
578															
579															
580															
581															
582															
583															
584															
585															
586															
587															
588															
589															
590															
591															
592															
593															
594															
595															
596															
597															
598															
599															
600															
601															
602															
603															
604															
605															
606															
607															
608															
609															
610															
611															
612															
613															
614															
615															
616															
617															
618															
619															
620															
621															
622															
623															
624															
625															
626															
627															
628															
629															
630															
631															
632															
633															
634															
635															
636															
637															
638															
639															
640															
641															
642															
643															
644															
645															

Field:	NEI Site ID	Emission Unit ID	Boiler MACT Survey Facility ID	Boiler MACT Survey Unit ID	Collection system ID (for collection systems that collect gases from multiple process units prior to air pollution control).	Control Capture Efficiency (%)	Configuration if not emitted through a conveyance	Process notes (optional)	Emission unit description	Year emission unit installed	Emission unit operating hr/yr	Emission unit exhaust flow rate, acfm (if known)	Exhaust gas temperature, F (if known)	Exhaust gas moisture content, % (if known)	Emission units IDs (or Collection System IDs) with combined exhaust flow
646															
647															
648															
649															
650															
651															
652															
653															
654															
655															
656															
657															
658															
659															
660															
661															
662															
663															
664															
665															
666															
667															
668															
669															
670															
671															
672															
673															
674															
675															
676															
677															
678															
679															
680															
681															
682															
683															
684															
685															
686															
687															
688															
689															
690															
691															
692															
693															
694															
695															
696															
697															
698															
699															
700															
701															
702															
703															
704															
705															
706															
707															
708															
709															
710															
711															
712															
713															
714															
715															
716															
717															
718															
719															
720															
721															
722															
723															
724															
725															
726															
727															
728															
729															
730															
731															
732															
733															
734															
735															
736															
737															
738															
739															
740															
741															
742															
743															
744															
745															
746															
747															
748															
749															
750															
751															
752															
753															
754															
755															
756															
757															
758															
759															
760															
761															
762															
763															
764															
765															
766															
767															
768															
769															
770															
771															
772															
773															
774															
775															
776															
777															
778															
779															
780															
781															
782															
783															
784															
785															
786															
787															
788															
789															
790															
791															
792															
793															
794															
795															
796															
797															
798															
799															
800															
801															
802															
803															
804															
805															
806															
807															
808															
809															
810															
811															
812															
813															
814															
815															
816															
817															

Field:	NEI Site ID	Emission Unit ID	Boiler MACT Survey Facility ID	Boiler MACT Survey Unit ID	Collection system ID (for collection systems that collect gases from multiple process units prior to air pollution control).	Control Capture Efficiency (%)	Configuration if not emitted through a conveyance	Process notes (optional)	Emission unit description	Year emission unit installed	Emission unit operating hr/yr	Emission unit exhaust flow rate, acfm (if known)	Exhaust gas temperature, F (if known)	Exhaust gas moisture content, % (if known)	Emission units IDs (or Collection System IDs) with combined exhaust flow
818															
819															
820															
821															
822															
823															
824															
825															
826															
827															
828															
829															
830															
831															
832															
833															
834															
835															
836															
837															
838															
839															
840															
841															
842															
843															
844															
845															
846															
847															
848															
849															
850															
851															
852															
853															
854															
855															
856															
857															
858															
859															
860															
861															
862															
863															
864															
865															
866															
867															
868															
869															
870															
871															
872															
873															
874															
875															
876															
877															
878															
879															
880															
881															
882															
883															
884															
885															
886															
887															
888															
889															
890															
891															
892															
893															
894															
895															
896															
897															
898															
899															
900															
901															
902															
903															
904															
905															
906															
907															
908															
909															
910															
911															
912															
913															
914															
915															
916															
917															
918															
919															
920															
921															
922															
923															
924															
925															
926															
927															
928															
929															
930															
931															
932															
933															
934															
935															
936															
937															
938															
939															
940															
941															
942															
943															
944															
945															
946															
947															
948															
949															
950															
951															
952															
953															
954															
955															
956															
957															
958															
959															
960															
961															
962															
963															
964															
965															
966															
967															
968															
969															
970															
971															
972															
973															
974															
975															
976															
977															
978															
979															
980															
981															
982															
983															
984															
985															
986															
987															
988															
989															

Field:	NEI Site ID	Emission Unit ID	Boiler MACT Survey Facility ID	Boiler MACT Survey Unit ID	Collection system ID (for collection systems that collect gases from multiple process units prior to air pollution control).	Control Capture Efficiency (%)	Configuration if not emitted through a conveyance	Process notes (optional)	Emission unit description	Year emission unit installed	Emission unit operating hr/yr	Emission unit exhaust flow rate, acfm (if known)	Exhaust gas temperature, F (if known)	Exhaust gas moisture content, % (if known)	Emission units IDs (or Collection System IDs) with combined exhaust flow
990															
991															
992															
993															
994															
995															
996															
997															
998															
999															
1000															

OMB Control No:
Expiration Date:
Review scale

You may find it helpful to use Excel's
UK = Unknown NA = Not Applica

*You do not need to complete these columns for boilers if you included Boiler MACT survey codes.

**You do not need to complete these columns for boilers if you included Boiler MACT survey codes (on rows where the Emission Unit ID is a boiler). However, boilers that control NCG/SOG must be listed (on rows for the Emission Unit IDs the boiler controls).

Instruction:	Specify the location of the flow rate provided. Select from menu (or write in response):	List any combustion control measures installed/employed to reduce air pollution from combustion sources (e.g., thermal oxidizers, direct-fired dryers, or boilers)	Select yes/no	Enter percent reduction (if known) and indicate the basis for the value provided (e.g., CEMS data, before-and-after testing, design value).	Enter percent reduction (if known) and indicate the basis for the value provided (e.g., CEMS data, before-and-after testing, design value).	Enter percent reduction (if known) and indicate the basis for the value provided (e.g., CEMS data, before-and-after testing, design value).	Describe any specific process control or pollution prevention measures used to reduce emissions from the Emission Unit ID (other then the use of combustion controls or an air pollution control device). Use this column to describe control measures that are not otherwise reflected elsewhere in this survey response spreadsheet.	Primary method of control. Use these "APCD" columns to describe the primary method of control. (Backup controls are to be entered in the next series of columns to the right). Enter controls in sequence in which they are used to control each emission unit. Enter controls for collection systems only in the row where the collection system ID appears in the Emission Unit ID column.	Enter ID code for first APCD (to be used throughout the survey spreadsheets)	Enter 2nd control device if multiple controls used. If process equipment such as a boiler or lime kiln) is used to control emissions, include any control devices used on the process equipment.	Enter ID code for 2nd APCD (to be used throughout the survey spreadsheets)	Enter 3rd control device if multiple controls used. If process equipment such as a boiler or lime kiln) is used to control emissions, include any control devices used on the process equipment.	Enter ID code for 3rd APCD (to be used throughout the survey spreadsheets)	Enter 4th control device if multiple controls used. If process equipment such as a boiler or lime kiln) is used to control emissions, include any control devices used on the process equipment.	Enter ID code for 4th APCD (to be used throughout the survey spreadsheets)
Survey reference:		Combustion modifications or controls*					Process controls or pollution prevention	Air pollution controls (primary method of control)**								
Field:	**Location of flow rate provided**	**Combustion controls**	**Were these combustion controls added within the last 10 years?**	**Combustion control NOx %red (note basis)**	**Combustion control SO2 %red (note basis)**	**Combustion control CO% red (note basis)**	**Process controls or pollution prevention measures**	**APCD1 type**	**APCD1_ID**	**APCD2 type**	**APCD2_ID**	**APCD3 type**	**APCD3_ID**	**APCD4 type**	**APCD4_ID**
Example entry:	inlet to collection system														
	inlet to collection system														
	stripper outlet (inlet to boiler)							Boiler EU55	Boiler EU55	WESP	WESP 1				
	collection system outlet (inlet to lime kiln)							Lime kiln 1	LK1	Scrubber	SCBR2				
	control device outlet (scrubber outlet							scrubber	SCBR6						
	control device outlet	overfire air	No	20%-design				WESP	WESP 1						
	NA														
	prior to atmospheric release							Uncontrolled							

OMB Control No:
Expiration Date:
Review scale
You may find it helpful to use Excel's
UK = Unknown, NA = Not Applica

Instruction:	Complete for emission units (as shown in the Emission Unit ID column) with alternate/backup controls used only during certain times. (Primary controls for the collection system were identified in the APCD columns to the left).	Specify conditions	Specify
Survey reference:	Backup controls**		
Field:	**Alternate method of control (specify APCD_ID or Emission Unit ID)**	**Conditions when alternate control is used**	**Approximate hr/yr when alternate control is used to control emissions from the Emission Unit ID**
Example entry:			
	TO	When Boiler EU55 is not operating	330
	TO	When LK1 is not operating	390

OMB Control No:
Expiration Date:
Review v#.#.#
You may find it helpful to use Excel's
UK = Unknown, NA = Not Applica

Instruction:	Select yes/no. [Consider how the emission unit is permitted when specifying if it is subject to NSPS BB. For example, a boiler or thermal oxidizer controlling BB emission units is not necessarily an emission unit subject to BB. If your permit indicates the unit is subject to BB then indicate "yes" in the column below.]	Provide year. If not known, enter approximate year (e.g., "pre-1990")	Select from menu.	Indicate NSPS BB TRS compliance option used to demonstrate NSPS compliance with primary method of control. [Note: You may enter the compliance option for each emission unit or for the relevant collection system if listed separately. Leave blank if not applicable.]	Indicate NSPS subpart BB TRS compliance option used to demonstrate compliance using backup method of control for the emission unit (if a backup method of control is used). [Note: Leave blank if no backup control is specified in the columns to the left for this emission unit.]
Survey reference:	Subpart BB NSPS applicability				
Field:	**Is emission unit subject to NSPS BB?**	**If yes, year became subject to BB (XXXX)**	**Reason subject to BB**	**Specify TRS compliance option used to demonstrate NSPS subpart BB compliance (if applicable)**	**Specify TRS compliance option used for backup method of control (if applicable)**
Example entry:	yes	pre-1990	new		
	yes	pre-1990	new		
	no				
	yes	pre-1990	collects emissions from BB emission units	combust gases in lime kiln or recovery furnace subject to subpart BB	5 ppmdv @ 10% O2 (combustion control)
	no				
	no				
	yes	pre-1990	new		
	no				

OMB Control No:
Expiration Date:
Review scale

You may find it helpful to use Excel's
UK = Unknown. NA = Not Applica

Instruction:	Select yes/no. Synthetic area sources should select "no." [Consider how the emission unit is permitted when specifying if it is subject to subpart S. For example, a boiler or TO controlling subpart S emission units is not necessarily an emission unit subject to subpart S. If your permit indicates the unit is subject to subpart S then indicate "yes" in the column below.]	Indicate compliance option met using primary method of control for the emission unit. If the clean condensate alternative (CCA) is used, be sure to complete the CCA tab.	Indicate compliance option met using backup method of control for the emission unit (if a backup method of control is used). If the CCA is used, be sure to complete the CCA tab.	See pull down menu for potential reasons some vent gas streams may not be covered under subpart S. Some rule exceptions are listed in the menu, along with a slection for synthetic area sources. You may write in other reasons.	Complete for each digester source. This could include multiple emission units that are part of one emission source (as noted in the Part I survey instructions for "Multiple emission units ducted to a single release point"). Select from menu	Enter numeric value	Select from menu. In the menu, "HW/SW swing" refers to digesters that process hardwood (HW) some of the time and softwood (SW) at other times. "HW and SW" refers to digesters that process a mixture of hardwood and softwood. You may also select "Non-wood."	Complete for each pulp washing system (e.g., washing line). Enter numeric value	Enter number of washers in series	Enter the types of washers used in series: V=vacuum drum D=diffusion P=pressure B=belt O=other	Write in the source of the wash water for the final stage of the vacuum drum washer (if vacuum drum washer used)	If you have vacuum drum washers, enter the final washing stage shower water methanol concentration in milligrams per liter, if known. Use the average from 2009 or target value.
Survey reference:	Subpart S NESHAP applicability				Digesters			Pulp washing systems				
Field:	**Is emission unit subject to NESHAP subpart S?**	**Subpart S compliance option used (for primary method of control)**	**Subpart S compliance option used (for backup method of control, if applicable)**	**Provide reason if not controlled to meet subpart S**	**Batch or continuous**	**Digester nominal daily production capacity, ADTP/d**	**Wood type (HW, SW, HW/SW swing)**	**Washing system nominal daily production capacity, ADTP/d**	**Total number of washers**	**Washer types and sequence**	**Source of vacuum drum washer final stage shower water**	**Vacuum drum washer final stage shower water methanol concentration, mg/l**
Example entry:	yes				Continuous		480 SW					
	yes				Continuous		520 HW/SW swing					
	yes	Use a boiler, LK, or RF in which the HAP gas stream in introduced with the primary fuel into the flame zone	Reduce total HAP concentration at the outlet of thermal oxidizer to <20 ppmv @ 10% O2 (dry basis)									
	yes	Use a boiler, LK, or RF in which the HAP gas stream in introduced with the primary fuel into the flame zone	Reduce total HAP concentration at the outlet of thermal oxidizer to <20 ppmv @ 10% O2 (dry basis)									
	no											
	no											
	yes											
	no							1000	3	D-V-V	stripped digester and evaporator condensates	

OMB Control No:
Expiration Date:
Review scales
You may find it helpful to use Excel's
UK = Unknown. NA = Not Applica

Instruction:	Complete for each, knotter, screen, and decker. Enter numeric value	Enter type of shower water used in decker (if applicable)	Complete for each evaporator system Enter numeric value	Enter Emission Unit ID(s) for pulp washers supplying weak liquor	Enter numeric value	Complete for oxygen delignification systems. Enter numeric value	Enter Emission Unit ID(s) for pulp washers supplying the brownstock	Enter the numeric value for methanol concentration, if known. Use the average from 2009 or target value.
Survey reference:	Knotters, screens, and deckers		Evaporators			Oxygen delignification		
Field:	**Knotter, screen, or decker nominal daily production capacity, ADTP/d**	**Type of shower water used in decker**	**Evaporator nominal daily production capacity, gal/day of weak black liquor**	**Which pulp washer(s) are the source(s) of weak liquor for the evaporator set?**	**How many evaporator effects are there?**	**Nominal daily production capacity, ADTP/d (inlet stock)**	**From which washer lines is the brownstock coming from?**	**Methanol concentration in post-O2 delignification washer shower water, mg/l**
Example entry:								
				1000 WASHER	6			
	300					1100 WASHER		436

OMB Control No:
Expiration Date:
Review scale

You may find it helpful to use Excel's
UK = Unknown NA = Not Applica

Instruction:	Select airsteam	Select yes/no	Enter description of the condensate streams (e.g., evaporator condensates, digester condensates, turpentine recovery system condensates, LVHC system condensates, HVLC system condensates), wastewater streams, or other process liquid streams that are stripped	Enter numeric value for total liquid flow to the stripper (design value)	Enter numeric value of the design parameter	Enter numeric value of the design parameter	Enter numeric value of the design parameter	Select from menu or write in	Enter the methanol removal efficiency if it has been measured (e.g., enter 92 for 92%). Use the average from 2009 or target value. If measured efficiency is not available, enter the design efficiency (e.g., enter "95-D" to reflect a design methanol removal efficiency of 95%) or "UK" for unknown.	Enter the total TRS removal efficiency if it has been measured (e.g., enter 92 for 92%). Use the average from 2009 or target value. If measured efficiency is not available, enter the design efficiency (e.g., enter "95-D" to reflect a design TRS removal efficiency of 95%) or "UK" for unknown
Survey reference:	Strippers									
Field:	**Type of stripper**	**Is the stripper integrated with the multiple effect evaporator system?**	**List all liquid streams sent to the stripper**	**Design liquid flow to the stripper, gpm**	**Design steam application rate, lb/gal**	**Design liquid column feed temperature, F**	**For air stripper, design air flow rate, cfm/gpm**	**Primary reason for installation of the stripper**	**Methanol removal efficiency, %**	**TRS removal efficiency, %**
Example entry:										
	steam	no	DIG-1 and DIG-2 condensates, EVAP condensates (effects 1-3), LVHC-1 condensates, Turpentine decanter underflow	315	1.5	130		water conservation; and subpart S kraft pulping condensate standards	92	94

OMB Control No:
Expiration Date:
Review scale

You may find it helpful to use Excel's
UK = Unknown. NA = Not Applica

Instruction:	Complete the pulp and liquor storage questions for pulp storage tanks (e.g., high density storage), stock chests, strong and weak liquor storage tanks. Do not include tanks that are defined as part of the bleaching, decker, evaporator, pulp washing, O2 delignification, steam stripper, process wastewater treatment, or turpentine recovery systems under Subpart S. Do not include acid condensate storage tanks. Select from menu or specify	Enter numeric value	Select from menu. If tank emissions are routed to a collection system and control device or to a process, then the collection system, APCD, or process Emission Unit ID should be reflected in the appropriate columns to the left of this worksheet.	Select from menu	Complete for liquor storage ponds Select from menu or write in	Enter numeric value	Enter numeric value	Enter numeric value. Use the average from 2009 or target value.
Survey reference:	Pulp storage and Liquor storage				Liquor storage ponds			
Field:	**Typical tank contents**	**Tank capacity, gal**	**Tank control technique**	**If floating roof is used, type of seal**	**Pond contents**	**Pond surface area, ft2**	**Pond capacity, gal**	**Annual pond throughput, gal/yr**
Example entry:								
	strong black liquor	14365	FR =fixed roof	NA	weak black liquor	26400	158400	2,300,000

OMB Control No:
Expiration Date:
Review scale
You may find it helpful to use Excel's
UK = Unknown NA = Not Applica

*You do not need to complete these columns for boilers if you included Boiler MACT survey codes.

Instruction:	Enter numeric value for lime kiln capacity in tons CaO/day. Enter (repeat) value for each causticizing emission unit listed in this tab.	Complete this question for lime mud washers and lime mud pre-coat filters. Select the source(s) of makeup water added to the mud washer or precoat filter from the list. You may write in more than one source. Untreated process condensates refers to process condensates that have received no treatment (such as steam stripping or biological treatment). See description of the other menu choices in the survey overview document instructions for the PI Controls tab.	Select yes/no. Answer this question with respect to each causticizing Emission Unit ID specified in column C.	Enter description if answer to previous question was "yes." Emission reductions achieved may apply to the Emission Unit ID specified (for which the process change was made) or to down stream emission units in the causticizing loop. Indicate the Emission Unit ID for any down stream emission units affected.	Complete for fuel-fired equipment such as such as boilers, thermal oxidizers controlling Part I emission sources, and direct-fired dryers. Note that information for recovery furnaces (also known as "recovery boilers" or "black liquor boilers") and lime kilns is to be supplied under Part III of the pulp and paper survey (not Part I). Enter numeric value in million Btu per hour (MMBtu/hr)	Complete for Emission Units such as boilers or thermal oxidizers that are used to incinerate NCG or SOG. Note that information for recovery furnaces (also known as "recovery boilers" or "black liquor boilers") and lime kilns is to be supplied under Part III of the pulp and paper survey (not Part II). List all sources of NCG or SOG, identified by their Collection System IDs or Emission Unit IDs separated by commas, for which the emission unit serves as primary control (e.g., LVHC1, SOG, TALLOIL, ...)	List all sources of NCG or SOG, identified by their Collection System IDs or Emission Unit IDs separated by commas, for which the emission unit serves as backup control (e.g., LVHC2, HVLC1 ...)	Complete for fuel-fired equipment such as boilers, thermal oxidizers controlling Part I emission sources, and direct-fired dryers. Enter the types of primary fuels fired (excluding NCG/SOGs). Note that information for recovery furnaces (also known as "recovery boilers" or "black liquor boilers") and lime kilns is to be supplied under Part III of the pulp and paper survey (not Part I). Enter primary fuel type	Enter decimal percent (e.g., 1 = 100% or 0.9 = 90%). Approximations based on the average from 2009 or a target value will suffice.	Optional. Enter the numeric higher heating value (HHV) for non-fossil fuels corresponding to the suggested units in next column. -EPA can assume default HHVs for fossil fuels, or you may opt to enter the HHV for your fossil fuel (e.g., if the fuel is relatively uncommon)	Specify units corresponding to the HHV. Use Btu/gal for liquid fuels, MMBtu/ton (dry basis) for solid fuels, and Btu/MMscf for gaseous fuels.	Optional. If biomass is the primary fuel type, specify average moisture content as fired for biomass fuels only (decimal percent by weight, i.e., enter "0.2" for 20%)
Survey reference:	Causticizing equipment				Fuel-fired equipment*	Equipment incinerating NCG or SOG		Primary fuels for fuel-fired equipment (except black or red liquor)*					
Field:	**Causticizing area nominal daily production capacity (use lime kiln tons CaO/day)**	**Source(s) of makeup water added to mud washer or precoat filter**	**Has the mill taken steps within the last 10 years to control makeup water quality for the causticizing emission unit such that air emissions from any equipment would be reduced?**	**If yes, please describe these changes and the reduction in emissions achieved**	**Design heat input capacity, MMBtu/hr**	**NCG/SOG for which the emission unit provides primary control**	**NCG/SOG for which the emission unit provides backup control**	**Primary fuel type**	**Approximate percent of annual heat input capacity (MMBtu/yr) supplied by primary fuel**	**Optional: Average HHV of non-fossil fuels**	**Optional: Primary fuel HHV units**		**Optional: Moisture content for biomass fuel (decimal % by weight)**
Example entry:													
						20	STRIPPER, LVHC-1						
						435 STRIPPER		hog fuel	0.95	12.6	MMBtu/ton		0.23
		3942000 treated wastewater, and partially treated wastewater - CLARIFIER1 water	yes	Replaced half of the lime mud wash water volume (from CLARIFIER1) with treated wastewater from STRIPPER in order to reduce methanol emissions from the lime mud washer and LK1.									

OMB Control No:
Expiration Date:
Review scope

You may find it helpful to use Excel's

UK = Unknown NA = Not Applica *You do not need to complete these columns for boilers if you included Boiler MACT survey codes. Hidden columns: Additional supplemental fuel columns (for types 2-6) are hidden. Unhide and complete these columns if relevant.

Instruction:	Complete for fuel-fired equipment such as boilers, thermal oxidizers controlling Part I emission sources, and direct-fired dryers. Enter the types of supplemental or other fuels fired (excluding SOG or other NCGs). Note that information for recovery furnaces (also known as "recovery boilers" or "black liquor boilers") and lime kilns is to be supplied under Part III of the pulp and paper survey (not Part I). Include secondary and additional fuels used routinely for multi-fuel fired equipment in these columns.	Enter decimal percent (e.g., 1 = 100% or 0.9 = 90%). Approximations based on the average from 2009 or a target value will suffice.	Enter the numeric higher heating value (HHV) for non-fossil fuels corresponding to the suggested units in next column. Optional. EPA can assume default HHVs for fossil fuels, or you may opt to enter the HHV for your fossil fuel (e.g., if the fuel is relatively uncommon)	Specify units corresponding to the HHV. Use Btu/gal for liquid fuels, MMBtu/ton (dry basis) for solid fuels, and Btu/MMscf for gaseous fuels.	Select from menu or write in. You may write in more than one condition. Multi-fuel fired units can select "routine use (multi-fuel fired unit)" from the menu.	Supply startup/shutdown information for equipment (including collection systems or APCDs) that appear in the Emission Unit ID column (except thermal oxidizers). Enter startup/shutdown information for thermal oxidizers in the *PI Controls* tab. Enter approximately how long it takes for the emission unit to startup. Use decimals if less than one hour (e.g., 18 minutes = 0.3 hr). Supply information for routine startup and shutdown events such as events associated with planned mill downtime. (Do not provide information for startup/shutdown events associated with control device or emission unit malfunctions). "Startup" means the setting in operation of an affected source or portion of an affected source for any purpose.	Select from menu or write in	Write in response specifying when startup ends and normal operation begins (e.g., Startup ends when the auxiliary burners switch off and material throughput begins to flow.)	Enter approximately how long it takes for the emission unit to shutdown. Use decimals if less than one hour (e.g., 18 minutes = 0.3 hr). "Shutdown" means the cessation of operation of an affected source or portion of an affected source for any purpose.	Select from menu or write in
Survey reference:	Supplemental or other fuels for fuel-fired equipment*					Emission Unit Startup and Shutdown					
Field:	**Supplemental fuel type 1**	**Approximate percent of annual heat input capacity (MMBtu/yr) supplied by supplemental fuel 1**	**Optional: Supplemental fuel type 1 HHV (if non-fossil)**	**Optional: Supplemental fuel type 1 HHV units**	**Conditions when supplemental fuel type 1 used**	**Approximate duration of emission unit startup (hours)**	**Measures employed to reduce air emissions during emission unit startup (if any)**	**What marks the end of emission unit startup and beginning of normal operating conditions?**	**Approximate duration of emission unit shutdown (hours)**	**Measures employed to reduce air emissions during shutdown (if any)**	
Example entry:						0.5	backup/alternate control	When full pulp flow from the digester is obtained	1	continue routing emissions to LVHC-1 collection system and primary or backup control system	
						0.5	backup/alternate control	When full pulp flow from the digester is obtained	1	continue routing emissions to LVHC-1 collection system and primary or backup control system	
						2	backup/alternate control	stripper steam application rate reaches target; and begin flow of process condensates from tank	1	stop routing process condensates to stripper before beginning shutdown	
						0.1	backup/alternate control	flow through bypass ceases	0.2	NA - applicable emission and parameter limits not expected to be exceeded during shutdown	
	natural gas	0.05			startup, backup	12	Operate WESP during boiler startup	Steam pressure of 100 psig or greater achieved	12	emission unit and control device operates during emission unit startup (but not necessarily in compliance with all NSPS/NESHAP parameter limits)	
						18	backup/alternate control	Strong liquor flow of 600 gpm at evaporator exit (55% solids)	16	continue routing emissions to LVHC-1 collection system and primary or backup control system	
						12	emission unit and control device operates in compliance with NSPS and NESHAP parameter limits during emission unit startup	Combustion temperature is reached	14	Temperature drops below 200F	

OMB Control No:
Expiration Date:
Review scale

You may find it helpful to use Excel's
UK = Unknown, NA = Not Applica

Instruction:	Write in response specifying when shutdown begins and normal operation ends (e.g., Shutdown begins when material throughput ceases to flow.)	OPTIONAL QUESTION. Input on appropriate standards that would be reasonable for your pulp and paper source category emission units is requested. Supply recommendations for the specific equipment (including collection systems or APCDs) appearing in the Emission Unit ID column.	Optional. Enter any comments you have on the data supplied.
Survey reference:			
Field:	**What marks the end of normal operating conditions and beginning of emission unit shutdown?**	**Optional: Do you wish to recommend a standard that would apply during startup or shutdown of this emission unit? If so, please describe the event to which the standard would apply; the recommended standard (this could be an emission limitation, work practice, or operational standard) that would apply during the period; the basis for the recommended standard; why and how the standard would minimize emissions during the event; and how would compliance be determined and/or monitored. Supply as a separate attachment to your survey response if necessary.**	**Comments**
Example entry:	Stop transfer of wood chips form the feed silo	Rule could require continued routing of emissions to LVHC-1 collection system and primary and/or backup control system during digester startup and shutdown.	
	Stop transfer of wood chips form the feed silo	Rule could require continued routing of emissions to LVHC-1 collection system and primary and/or backup control system during digester startup and shutdown.	
	shut off steam supply to the stripper	Rule could require continued routing of SOG to existing primary and/or backup control system during stripper startup and shutdown.	
	flow through bypass begins		
	Stop charging hog fuel into boiler		
	Steam flow to first effect reduced by 50%	Rule could require continued routing of emissions to LVHC-1 collection system and primary and/or backup control system during evaporator startup and shutdown.	
	Cease flow of liquor through injection nozzles		

OMB Control No: xxxx-xxxx
Expiration Date: xx/xx/xxxx
Review Draft

UK = Unknown. **NA = Not Applicable**. See instruction document for details on use of these terms.

Pulp and Paper sector permit data You do not need to complete this tab for boilers.

Instruction:	Provide for all entries. This should match NEI Site ID used in Part II.	Provide for all entries. Use the Emission Unit ID in the *PI Equip detail* tab if the individual emission unit was listed there. If emission units are aggregated by a collection system then you may need to use the Collection system ID from the *PI Equip detail* tab.	OPTIONAL column useful for cross-checking permit data and when comparing permit to NEI.	Select from menu or write in	OPTIONAL. Complete this column to avoid restating Federal permit limits in the columns to the right.	Enter numeric value of permit limit coinciding with the pollutant selected. You do not have to provide every limit for pollutants with multiple limits in different units of measure. See the survey instruction document for permit limit units of interest.
Survey reference:		Equipment identification				
Field:	**NEI Site ID**	**Emission Unit ID or Collection System ID**	**Identifier used in permit (e.g., emission unit ID, stack ID, etc) - optional**	**Pollutant**	**If the permit limit is identical to the Federal NESHAP or NSPS limit, you may enter the NESHAP/NSPS subpart here rather than restating the Federal limit in the columns to the right**	**Numeric permit limit 1**
Example entry:	99999	EU30	EU30_1	PM - filterable		0.02
	99999	EU30	EU30_1	Opacity		5

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

Field:	NEI Site ID	Emission Unit ID or Collection System ID	Identifier used in permit (e.g., emission unit ID, stack ID, etc) - optional	Pollutant	If the permit limit is identical to the Federal NESHAP or NSPS limit, you may enter the NESHAP/NSPS subpart here rather than restating the Federal limit in the columns to the right	Numeric permit limit 1
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57						
58						
59						
60						
61						
62						
63						
64						
65						
66						
67						
68						
69						
70						
71						
72						
73						
74						
75						
76						
77						
78						
79						
80						
81						
82						

Field:	NEI Site ID	Emission Unit ID or Collection System ID	Identifier used in permit (e.g., emission unit ID, stack ID, etc) - optional	Pollutant	If the permit limit is identical to the Federal NESHAP or NSPS limit, you may enter the NESHAP/NSPS subpart here rather than restating the Federal limit in the columns to the right	Numeric permit limit 1
83						
84						
85						
86						
87						
88						
89						
90						
91						
92						
93						
94						
95						
96						
97						
98						
99						
100						
101						
102						
103						
104						
105						
106						
107						
108						
109						
110						
111						
112						
113						
114						
115						
116						
117						
118						
119						
120						
121						
122						
123						
124						
125						
126						
127						
128						
129						
130						
131						
132						
133						
134						
135						
136						

Field:	NEI Site ID	Emission Unit ID or Collection System ID	Identifier used in permit (e.g., emission unit ID, stack ID, etc) - optional	Pollutant	If the permit limit is identical to the Federal NESHAP or NSPS limit, you may enter the NESHAP/NSPS subpart here rather than restating the Federal limit in the columns to the right	Numeric permit limit 1
137						
138						
139						
140						
141						
142						
143						
144						
145						
146						
147						
148						
149						
150						
151						
152						
153						
154						
155						
156						
157						
158						
159						
160						
161						
162						
163						
164						
165						
166						
167						
168						
169						
170						
171						
172						
173						
174						
175						
176						
177						
178						
179						
180						
181						
182						
183						
184						
185						
186						
187						
188						
189						
190						

Field:	NEI Site ID	Emission Unit ID or Collection System ID	Identifier used in permit (e.g., emission unit ID, stack ID, etc) - optional	Pollutant	If the permit limit is identical to the Federal NESHAP or NSPS limit, you may enter the NESHAP/NSPS subpart here rather than restating the Federal limit in the columns to the right	Numeric permit limit 1
191						
192						
193						
194						
195						
196						
197						
198						
199						
200						
201						
202						
203						
204						
205						
206						
207						
208						
209						
210						
211						
212						
213						
214						
215						
216						
217						
218						
219						
220						
221						
222						
223						
224						
225						
226						
227						
228						
229						
230						
231						
232						
233						
234						
235						
236						
237						
238						
239						
240						
241						
242						
243						
244						

Field:	NEI Site ID	Emission Unit ID or Collection System ID	Identifier used in permit (e.g., emission unit ID, stack ID, etc) - optional	Pollutant	If the permit limit is identical to the Federal NESHAP or NSPS limit, you may enter the NESHAP/NSPS subpart here rather than restating the Federal limit in the columns to the right	Numeric permit limit 1
245						
246						
247						
248						
249						
250						
251						
252						
253						
254						
255						
256						
257						
258						
259						
260						
261						
262						
263						
264						
265						
266						
267						
268						
269						
270						
271						
272						
273						
274						
275						
276						
277						
278						
279						
280						
281						
282						
283						
284						
285						
286						
287						
288						
289						
290						
291						
292						
293						
294						
295						
296						
297						
298						

Field:	NEI Site ID	Emission Unit ID or Collection System ID	Identifier used in permit (e.g., emission unit ID, stack ID, etc) - optional	Pollutant	If the permit limit is identical to the Federal NESHAP or NSPS limit, you may enter the NESHAP/NSPS subpart here rather than restating the Federal limit in the columns to the right	Numeric permit limit 1
299						
300						
301						
302						
303						
304						
305						
306						
307						
308						
309						
310						
311						
312						
313						
314						
315						
316						
317						
318						
319						
320						
321						
322						
323						
324						
325						
326						
327						
328						
329						
330						
331						
332						
333						
334						
335						
336						
337						
338						
339						
340						
341						
342						
343						
344						
345						
346						
347						
348						
349						
350						
351						
352						

Field:	NEI Site ID	Emission Unit ID or Collection System ID	Identifier used in permit (e.g., emission unit ID, stack ID, etc) - optional	Pollutant	If the permit limit is identical to the Federal NESHAP or NSPS limit, you may enter the NESHAP/NSPS subpart here rather than restating the Federal limit in the columns to the right	Numeric permit limit 1
353						
354						
355						
356						
357						
358						
359						
360						
361						
362						
363						
364						
365						
366						
367						
368						
369						
370						
371						
372						
373						
374						
375						
376						
377						
378						
379						
380						
381						
382						
383						
384						
385						
386						
387						
388						
389						
390						
391						
392						
393						
394						
395						
396						
397						
398						
399						
400						
401						
402						
403						
404						
405						
406						

Field:	NEI Site ID	Emission Unit ID or Collection System ID	Identifier used in permit (e.g., emission unit ID, stack ID, etc) - optional	Pollutant	If the permit limit is identical to the Federal NESHAP or NSPS limit, you may enter the NESHAP/NSPS subpart here rather than restating the Federal limit in the columns to the right	Numeric permit limit 1
407						
408						
409						
410						
411						
412						
413						
414						
415						
416						
417						
418						
419						
420						
421						
422						
423						
424						
425						
426						
427						
428						
429						
430						
431						
432						
433						
434						
435						
436						
437						
438						
439						
440						
441						
442						
443						
444						
445						
446						
447						
448						
449						
450						
451						
452						
453						
454						
455						
456						
457						
458						
459						
460						

Field:	NEI Site ID	Emission Unit ID or Collection System ID	Identifier used in permit (e.g., emission unit ID, stack ID, etc) - optional	Pollutant	If the permit limit is identical to the Federal NESHAP or NSPS limit, you may enter the NESHAP/NSPS subpart here rather than restating the Federal limit in the columns to the right	Numeric permit limit 1
461						
462						
463						
464						
465						
466						
467						
468						
469						
470						
471						
472						
473						
474						
475						
476						
477						
478						
479						
480						
481						
482						
483						
484						
485						
486						
487						
488						
489						
490						
491						
492						
493						
494						
495						
496						
497						
498						
499						
500						
501						
502						
503						
504						
505						
506						
507						
508						
509						
510						
511						
512						
513						
514						

Field:	NEI Site ID	Emission Unit ID or Collection System ID	Identifier used in permit (e.g., emission unit ID, stack ID, etc) - optional	Pollutant	If the permit limit is identical to the Federal NESHAP or NSPS limit, you may enter the NESHAP/NSPS subpart here rather than restating the Federal limit in the columns to the right	Numeric permit limit 1
515						
516						
517						
518						
519						
520						
521						
522						
523						
524						
525						
526						
527						
528						
529						
530						
531						
532						
533						
534						
535						
536						
537						
538						
539						
540						
541						
542						
543						
544						
545						
546						
547						
548						
549						
550						
551						
552						
553						
554						
555						
556						
557						
558						
559						
560						
561						
562						
563						
564						
565						
566						
567						
568						

Field:	NEI Site ID	Emission Unit ID or Collection System ID	Identifier used in permit (e.g., emission unit ID, stack ID, etc) - optional	Pollutant	If the permit limit is identical to the Federal NESHAP or NSPS limit, you may enter the NESHAP/NSPS subpart here rather than restating the Federal limit in the columns to the right	Numeric permit limit 1
569						
570						
571						
572						
573						
574						
575						
576						
577						
578						
579						
580						
581						
582						
583						
584						
585						
586						
587						
588						
589						
590						
591						
592						
593						
594						
595						
596						
597						
598						
599						
600						
601						
602						
603						
604						
605						
606						
607						
608						
609						
610						
611						
612						
613						
614						
615						
616						
617						
618						
619						
620						
621						
622						

Field:	NEI Site ID	Emission Unit ID or Collection System ID	Identifier used in permit (e.g., emission unit ID, stack ID, etc) - optional	Pollutant	If the permit limit is identical to the Federal NESHAP or NSPS limit, you may enter the NESHAP/NSPS subpart here rather than restating the Federal limit in the columns to the right	Numeric permit limit 1
623						
624						
625						
626						
627						
628						
629						
630						
631						
632						
633						
634						
635						
636						
637						
638						
639						
640						
641						
642						
643						
644						
645						
646						
647						
648						
649						
650						
651						
652						
653						
654						
655						
656						
657						
658						
659						
660						
661						
662						
663						
664						
665						
666						
667						
668						
669						
670						
671						
672						
673						
674						
675						
676						

Field:	NEI Site ID	Emission Unit ID or Collection System ID	Identifier used in permit (e.g., emission unit ID, stack ID, etc) - optional	Pollutant	If the permit limit is identical to the Federal NESHAP or NSPS limit, you may enter the NESHAP/NSPS subpart here rather than restating the Federal limit in the columns to the right	Numeric permit limit 1
677						
678						
679						
680						
681						
682						
683						
684						
685						
686						
687						
688						
689						
690						
691						
692						
693						
694						
695						
696						
697						
698						
699						
700						
701						
702						
703						
704						
705						
706						
707						
708						
709						
710						
711						
712						
713						
714						
715						
716						
717						
718						
719						
720						
721						
722						
723						
724						
725						
726						
727						
728						
729						
730						

Field:	NEI Site ID	Emission Unit ID or Collection System ID	Identifier used in permit (e.g., emission unit ID, stack ID, etc) - optional	Pollutant	If the permit limit is identical to the Federal NESHAP or NSPS limit, you may enter the NESHAP/NSPS subpart here rather than restating the Federal limit in the columns to the right	Numeric permit limit 1
731						
732						
733						
734						
735						
736						
737						
738						
739						
740						
741						
742						
743						
744						
745						
746						
747						
748						
749						
750						
751						
752						
753						
754						
755						
756						
757						
758						
759						
760						
761						
762						
763						
764						
765						
766						
767						
768						
769						
770						
771						
772						
773						
774						
775						
776						
777						
778						
779						
780						
781						
782						
783						
784						

Field:	NEI Site ID	Emission Unit ID or Collection System ID	Identifier used in permit (e.g., emission unit ID, stack ID, etc) - optional	Pollutant	If the permit limit is identical to the Federal NESHAP or NSPS limit, you may enter the NESHAP/NSPS subpart here rather than restating the Federal limit in the columns to the right	Numeric permit limit 1
785						
786						
787						
788						
789						
790						
791						
792						
793						
794						
795						
796						
797						
798						
799						
800						
801						
802						
803						
804						
805						
806						
807						
808						
809						
810						
811						
812						
813						
814						
815						
816						
817						
818						
819						
820						
821						
822						
823						
824						
825						
826						
827						
828						
829						
830						
831						
832						
833						
834						
835						
836						
837						
838						

Field:	NEI Site ID	Emission Unit ID or Collection System ID	Identifier used in permit (e.g., emission unit ID, stack ID, etc) - optional	Pollutant	If the permit limit is identical to the Federal NESHAP or NSPS limit, you may enter the NESHAP/NSPS subpart here rather than restating the Federal limit in the columns to the right	Numeric permit limit 1
839						
840						
841						
842						
843						
844						
845						
846						
847						
848						
849						
850						
851						
852						
853						
854						
855						
856						
857						
858						
859						
860						
861						
862						
863						
864						
865						
866						
867						
868						
869						
870						
871						
872						
873						
874						
875						
876						
877						
878						
879						
880						
881						
882						
883						
884						
885						
886						
887						
888						
889						
890						
891						
892						

Field:	NEI Site ID	Emission Unit ID or Collection System ID	Identifier used in permit (e.g., emission unit ID, stack ID, etc) - optional	Pollutant	If the permit limit is identical to the Federal NESHAP or NSPS limit, you may enter the NESHAP/NSPS subpart here rather than restating the Federal limit in the columns to the right	Numeric permit limit 1
893						
894						
895						
896						
897						
898						
899						
900						
901						
902						
903						
904						
905						
906						
907						
908						
909						
910						
911						
912						
913						
914						
915						
916						
917						
918						
919						
920						
921						
922						
923						
924						
925						
926						
927						
928						
929						
930						
931						
932						
933						
934						
935						
936						
937						
938						
939						
940						
941						
942						
943						
944						
945						
946						

Field:	NEI Site ID	Emission Unit ID or Collection System ID	Identifier used in permit (e.g., emission unit ID, stack ID, etc) - optional	Pollutant	If the permit limit is identical to the Federal NESHAP or NSPS limit, you may enter the NESHAP/NSPS subpart here rather than restating the Federal limit in the columns to the right	Numeric permit limit 1
947						
948						
949						
950						
951						
952						
953						
954						
955						
956						
957						
958						
959						
960						
961						
962						
963						
964						
965						
966						
967						
968						
969						
970						
971						
972						
973						
974						
975						
976						
977						
978						
979						
980						
981						
982						
983						
984						
985						
986						
987						
988						
989						
990						
991						
992						
993						
994						
995						
996						
997						
998						
999						
1000						

Field:	NEI Site ID	Emission Unit ID or Collection System ID	Identifier used in permit (e.g., emission unit ID, stack ID, etc) - optional	Pollutant	If the permit limit is identical to the Federal NESHAP or NSPS limit, you may enter the NESHAP/NSPS subpart here rather than restating the Federal limit in the columns to the right	Numeric permit limit 1
1001						
1002						
1003						
1004						
1005						
1006						
1007						
1008						
1009						
1010						
1011						
1012						
1013						
1014						
1015						
1016						
1017						
1018						
1019						
1020						
1021						
1022						
1023						
1024						
1025						
1026						
1027						
1028						
1029						
1030						
1031						
1032						
1033						
1034						
1035						
1036						
1037						
1038						
1039						
1040						
1041						
1042						
1043						
1044						
1045						
1046						
1047						
1048						
1049						
1050						
1051						
1052						
1053						
1054						

Field:	NEI Site ID	Emission Unit ID or Collection System ID	Identifier used in permit (e.g., emission unit ID, stack ID, etc) - optional	Pollutant	If the permit limit is identical to the Federal NESHAP or NSPS limit, you may enter the NESHAP/NSPS subpart here rather than restating the Federal limit in the columns to the right	Numeric permit limit 1
1055						
1056						
1057						
1058						
1059						
1060						
1061						
1062						
1063						
1064						
1065						
1066						
1067						
1068						
1069						
1070						
1071						
1072						
1073						
1074						
1075						
1076						
1077						
1078						
1079						
1080						
1081						
1082						
1083						
1084						
1085						
1086						
1087						
1088						
1089						
1090						
1091						
1092						
1093						
1094						
1095						
1096						
1097						
1098						
1099						
1100						
1101						
1102						
1103						
1104						
1105						
1106						
1107						
1108						

Field:	NEI Site ID	Emission Unit ID or Collection System ID	Identifier used in permit (e.g., emission unit ID, stack ID, etc) - optional	Pollutant	If the permit limit is identical to the Federal NESHAP or NSPS limit, you may enter the NESHAP/NSPS subpart here rather than restating the Federal limit in the columns to the right	Numeric permit limit 1
1109						
1110						
1111						
1112						
1113						
1114						
1115						
1116						
1117						
1118						
1119						
1120						
1121						
1122						
1123						
1124						
1125						
1126						
1127						
1128						
1129						
1130						
1131						
1132						
1133						
1134						
1135						
1136						
1137						
1138						
1139						
1140						
1141						
1142						
1143						
1144						
1145						
1146						
1147						
1148						
1149						
1150						
1151						
1152						
1153						
1154						
1155						
1156						
1157						
1158						
1159						
1160						
1161						
1162						

Field:	NEI Site ID	Emission Unit ID or Collection System ID	Identifier used in permit (e.g., emission unit ID, stack ID, etc) - optional	Pollutant	If the permit limit is identical to the Federal NESHAP or NSPS limit, you may enter the NESHAP/NSPS subpart here rather than restating the Federal limit in the columns to the right	Numeric permit limit 1
1163						
1164						
1165						
1166						
1167						
1168						
1169						
1170						
1171						
1172						
1173						
1174						
1175						
1176						
1177						
1178						
1179						
1180						
1181						
1182						
1183						
1184						
1185						
1186						
1187						
1188						
1189						
1190						
1191						
1192						
1193						
1194						
1195						
1196						
1197						
1198						
1199						
1200						
1201						
1202						
1203						
1204						
1205						
1206						
1207						
1208						
1209						
1210						
1211						
1212						
1213						
1214						
1215						
1216						

Field:	NEI Site ID	Emission Unit ID or Collection System ID	Identifier used in permit (e.g., emission unit ID, stack ID, etc) - optional	Pollutant	If the permit limit is identical to the Federal NESHAP or NSPS limit, you may enter the NESHAP/NSPS subpart here rather than restating the Federal limit in the columns to the right	Numeric permit limit 1
1217						
1218						
1219						
1220						
1221						
1222						
1223						
1224						
1225						
1226						
1227						
1228						
1229						
1230						
1231						
1232						
1233						
1234						
1235						
1236						
1237						
1238						
1239						
1240						
1241						
1242						
1243						
1244						
1245						
1246						
1247						
1248						
1249						
1250						
1251						
1252						
1253						
1254						
1255						
1256						
1257						
1258						
1259						
1260						
1261						
1262						
1263						
1264						
1265						
1266						
1267						
1268						
1269						
1270						

Field:	NEI Site ID	Emission Unit ID or Collection System ID	Identifier used in permit (e.g., emission unit ID, stack ID, etc) - optional	Pollutant	If the permit limit is identical to the Federal NESHAP or NSPS limit, you may enter the NESHAP/NSPS subpart here rather than restating the Federal limit in the columns to the right	Numeric permit limit 1
1271						
1272						
1273						
1274						
1275						
1276						
1277						
1278						
1279						
1280						
1281						
1282						
1283						
1284						
1285						
1286						
1287						
1288						
1289						
1290						
1291						
1292						
1293						
1294						
1295						
1296						
1297						
1298						
1299						
1300						
1301						
1302						
1303						
1304						
1305						
1306						
1307						
1308						
1309						
1310						
1311						
1312						
1313						
1314						
1315						
1316						
1317						
1318						
1319						
1320						
1321						
1322						
1323						
1324						

Field:	NEI Site ID	Emission Unit ID or Collection System ID	Identifier used in permit (e.g., emission unit ID, stack ID, etc) - optional	Pollutant	If the permit limit is identical to the Federal NESHAP or NSPS limit, you may enter the NESHAP/NSPS subpart here rather than restating the Federal limit in the columns to the right	Numeric permit limit 1
1325						
1326						
1327						
1328						
1329						
1330						
1331						
1332						
1333						
1334						
1335						
1336						
1337						
1338						
1339						
1340						
1341						
1342						
1343						
1344						
1345						
1346						
1347						
1348						
1349						
1350						
1351						
1352						
1353						
1354						
1355						
1356						
1357						
1358						
1359						
1360						
1361						
1362						
1363						
1364						
1365						
1366						
1367						
1368						
1369						
1370						
1371						
1372						
1373						
1374						
1375						
1376						
1377						
1378						

Field:	NEI Site ID	Emission Unit ID or Collection System ID	Identifier used in permit (e.g., emission unit ID, stack ID, etc) - optional	Pollutant	If the permit limit is identical to the Federal NESHAP or NSPS limit, you may enter the NESHAP/NSPS subpart here rather than restating the Federal limit in the columns to the right	Numeric permit limit 1
1379						
1380						
1381						
1382						
1383						
1384						
1385						
1386						
1387						
1388						
1389						
1390						
1391						
1392						
1393						
1394						
1395						
1396						
1397						
1398						
1399						
1400						
1401						
1402						
1403						
1404						
1405						
1406						
1407						
1408						
1409						
1410						
1411						
1412						
1413						
1414						
1415						
1416						
1417						
1418						
1419						
1420						
1421						
1422						
1423						
1424						
1425						
1426						
1427						
1428						
1429						
1430						
1431						
1432						

Field:	NEI Site ID	Emission Unit ID or Collection System ID	Identifier used in permit (e.g., emission unit ID, stack ID, etc) - optional	Pollutant	If the permit limit is identical to the Federal NESHAP or NSPS limit, you may enter the NESHAP/NSPS subpart here rather than restating the Federal limit in the columns to the right	Numeric permit limit 1
1433						
1434						
1435						
1436						
1437						
1438						
1439						
1440						
1441						
1442						
1443						
1444						
1445						
1446						
1447						
1448						
1449						
1450						
1451						
1452						
1453						
1454						
1455						
1456						
1457						
1458						
1459						
1460						
1461						
1462						
1463						
1464						
1465						
1466						
1467						
1468						
1469						
1470						
1471						
1472						
1473						
1474						
1475						
1476						
1477						
1478						
1479						
1480						
1481						
1482						
1483						
1484						
1485						
1486						

Field:	NEI Site ID	Emission Unit ID or Collection System ID	Identifier used in permit (e.g., emission unit ID, stack ID, etc) - optional	Pollutant	If the permit limit is identical to the Federal NESHAP or NSPS limit, you may enter the NESHAP/NSPS subpart here rather than restating the Federal limit in the columns to the right	Numeric permit limit 1
1487						
1488						
1489						
1490						
1491						
1492						
1493						
1494						
1495						
1496						
1497						
1498						
1499						
1500						

OMB Control No:
Expiration Date:
Review Draft

UK = Unknown. NA = I

Pulp and Paper sector

Instruction:	Enter units for permit limit	Supply averaging time for permit limit if an averaging time is specified in the permit. Averaging times are commonly specified for pollutants measured with continuous monitors (e.g., 3-hour block average, daily average, etc). Leave blank if no averaging time is specified in your permit.	Enter numeric value of permit limit coinciding with the pollutant selected. You do not have to provide every limit for pollutants with multiple limits in different units of measure. See the survey instruction document for permit limit units of interest.	Enter units for permit limit	Supply averaging time for permit limit if an averaging time is specified in the permit. Averaging times are commonly specified for pollutants measured with continuous monitors (e.g., 3-hour block average, daily average, etc). Leave blank if no averaging time is specified in your permit.	Enter numeric value of permit limit coinciding with the pollutant selected. You do not have to provide every limit for pollutants with multiple limits in different units of measure. See the survey instruction document for permit limit units of interest.	Enter units for permit limit
Survey reference:							
Field:	**Units for permit limit 1 (including any applicable %O2 or %CO2 correction factors)**	**Averaging time for permit limit 1 (if applicable)**	**Numeric permit limit 2**	**Units for permit limit 2 (including any applicable %O2 or %CO2 correction factors)**	**Averaging time for permit limit 2 (if applicable)**	**Numeric permit limit 3**	**Units for permit limit 3 (including any applicable %O2 or %CO2 correction factors)**
Example entry:	gr/dscf @ 8% O2 % opacity	6-min avg	20	% opacity	Do not exceed 20% for more than three 6-min averages in a 3-hour period determined by Method 9		
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							

OMB Control No:
Expiration Date:
Review Draft

UK = Unknown. NA = I

Pulp and Paper sector

Instruction:	Supply averaging time for permit limit if an averaging time is specified in the permit. Averaging times are commonly specified for pollutants measured with continuous monitors (e.g., 3-hour block average, daily average, etc). Leave blank if no averaging time is specified in your permit.	Enter numeric value of permit limit coinciding with the pollutant selected. You do not have to provide every limit for pollutants with multiple limits in different units of measure. See the survey instruction document for permit limit units of interest.	Enter units for permit limit	Supply averaging time for permit limit if an averaging time is specified in the permit. Averaging times are commonly specified for pollutants measured with continuous monitors (e.g., 3-hour block average, daily average, etc). Leave blank if no averaging time is specified in your permit.	Enter numeric value of permit limit coinciding with the pollutant selected. You do not have to provide every limit for pollutants with multiple limits in different units of measure. See the survey instruction document for permit limit units of interest.	Enter units for permit limit	Supply averaging time for permit limit if an averaging time is specified in the permit. Averaging times are commonly specified for pollutants measured with continuous monitors (e.g., 3-hour block average, daily average, etc). Leave blank if no averaging time is specified in your permit.
Survey reference:							
Field:	**Averaging time for permit limit 3 (if applicable)**	**Numeric permit limit 4**	**Units for permit limit 4 (including any applicable %O2 or %CO2 correction factors)**	**Averaging time for permit limit 4 (if applicable)**	**Numeric permit limit 5**	**Units for permit limit 5 (including any applicable %O2 or %CO2 correction factors)**	**Averaging time for permit limit 5 (if applicable)**
Example entry:							

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

OMB Control No:
Expiration Date:
Review Draft

UK = Unknown. **NA = I**

Pulp and Paper sector

Instruction:	Optional. Enter any comments you have on the data supplied.
Survey reference:	
Field:	**Comments**
Example entry:	

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

OMB Control No: xxxx-xxxx
Expiration Date: xx/xx/xxxx

Did any of the responses (individual cells) you entered in this tab contain CBI?
If yes, be sure to shade the CBI-containing cells red and follow the instructions in section C of the survey overview document for submitting CBI.

Review Draft

Complete this table for add-on air pollution controls. Questions regarding combustion controls and process changes are included elsewhere in other survey tabs.
UK = Unknown. NA = Not Applicable. See instruction document for details on use of these terms.
You do not need to complete this tab for boiler air pollution control devices.

Instruction:	Provide for all entries. This should match NEI Site ID used in Part II.	Enter APCD_ID matching the *PI Equip detail* tab	Enter Emission Unit ID or Collection system ID matching the Equip detail tab. Note if control device serves as a backup control.	Select from menu or write in	Enter the manufacturer of the APCD, if known. Enter "UK" for unknown. Enter "shop-built" for equipment designed by the mill.	Enter the year installed, if known. Enter "UK" if unknown; or "pre-1990" if more than 20 years old and the install date is unknown. If the APCD was substantially upgraded, enter the year of the upgrade as "XXXX-upgrade."	Enter the typical pressure drop across the control device in inches of water	Enter control efficiencies, if known (e.g., enter 99 for 99%). "Actual" control efficiency is a measured value obtained through inlet/outlet emissions testing. Leave blank if not known or not applicable.				Include control efficiency for specific HAP that you identify. This may be HAPs used as surrogates in a rule (e.g., methanol, chlorine) or other HAP.	You may attach a separate listing of HAPs and control efficiencies if this information is available for a number of compounds.	Complete for thermal oxidizers or incinerators used to control Part I emission sources. Select from list	Enter number of canisters (media beds) for a regenerative thermal oxidizer (RTO)	Enter target firebox combustion/operating temperature (F)	Enter time stack gases are exposed to the target temperature (actual or design value)	Select yes/no	Select from list or write in
Survey reference:	APCD Identification						P-drop	Control efficiency							Thermal oxidizers/incinerators					
Field:	**NEI Site ID**	**APCD_ID**	**Emission Unit ID(s) or Collection system ID(s) controlled**	**Type of control device**	**APCD manufacturer (if known)**	**Year installed (XXXX)**	**Pressure drop, in. H2O**	**Actual PM control efficiency (if known), %**	**Actual TRS control efficiency (if known), %**	**Actual HCl control efficiency (if known), %**	**Actual SO2 control efficiency (if known), %**	**Actual HAP control efficiency (if known), %**	**Specify HAP**	**Incinerator type**	**If RTO, number of canisters**	**Target firebox temperature (F)**	**Residence time at operating temperature (sec)**	**Heat recovery**	**What is the recovered heat from the incinerator exhaust used for?**
Example entry:	99999	ANYCONTROL	ANYUNIT	ANYTYPE	UK	pre-1990	4	98				90	Methanol						
	99999	SCRB2	LK1, LVHC1	Scrubber	Ducon	1985	6	95	92		82	50	Formaldehyde, Methanol						
	99999	TO	STRIPPER (backup); LVHC1 (backup)	Thermal oxidizer/incinerator	Coen	1999	2		98					Single-stage combustion chamber	NA	1300	1.8	no	NA

OMB Control No:
Expiration Date:
Review Draft

Complete this table for add-on air po
UK = Unknown. NA = Not Applica
You do not need to complete this tab

Instruction:	Complete the sorbent injection questions for sorbents injected into the gas stream prior to collection by a fabric filter or other control device for which information is being provided. For example, complete the sorbent injection questions for a dry injection fabric filter system in the same row where you enter information for the fabric filter.	Select from list or write in	Enter pounds per hour (lb/hr) of sorbent injected into the exhaust gas stream. Use the average from 2009 or a target value.	Complete for fabric filters (baghouses) used on significant pulp and paper processing equipment (e.g., combustion units). You do not need to provide these details for baghouses used solely for dust collection from wood/material handling operations. Indicate the filter material and note if coatings are added to the filter material (e.g., polyester with PTFE coating). If no coating is indicated (e.g., polyester), the it will be assumed that the filter material is uncoated.	Select from list	Enter typical bag life (or expected bag life), months	Enter number of fabric filter compartments. Enter "1" if the baghouse is not separated by different compartments.	Enter the design air-to-cloth ratio (gas flow divided by the filter bag material area)	Complete the ESP questions for dry ESPs and WESPs Enter number of fields	Enter number of fields used during normal operation. This may be the same as the total number of fields unless some fields are offline (e.g., for cleaning).	Enter the design specific collection area (area of the plates divided by gas flow rate).	Describe any ESP upgrades made within the last 10 years, such as addition of fields or other upgrades to increase ESP efficiency. If no upgrades, leave blank.	Complete these additional ESP questions for WESPs. If a quench is used prior to the ESP, complete the scrubber questions for the quench.	Include water flow through the WESP. Use the average from 2009 or a target value.	Complete for all types of wet scrubbers (venturi, tray, plate, injection, quench, etc) Enter type of alkali added (e.g., NaOH/caustic, KOH, KMNO4). Leave blank if no alkali added.	Enter the numeric value for the scrubber design liquid-to-gas ratio (L/G) in gallons of liquid per 1000 acfm of gas. Use the average from 2009 or a target value.	Enter numeric value for the target pH. Use the average from 2009 or a target value.	Enter typical gallons per minute of scrubbing fluid (e.g., water) makeup added to the system. Use the average from 2009 or a target value.	Select yes/no for scrubbers that control chemical recovery furnaces or Semichemical liquor combustion units. Leave blank for other scrubbers.	Complete the scrubber questions and complete the additional questions below related to the packing material	
Survey reference:	Sorbent injection			Fabric filters					ESPs				WESPs		Scrubber					Packed bed scrubbers/absorbers	
Field:	**Sorbent type**	**List pollutants the sorbent injection was installed to control**	**Sorbent injection rate, lb/hr**	**Filter material and added coatings**	**Bag cleaning method**	**Typical bag life (months)**	**Number of compartments**	**Air-to-cloth ratio (acfm/ft2)**	**Total number of fields**	**Number of fields used during normal operation**	**Specific collection area, ft²/1,000 acfm**	**Have fields/chambers been added to expand the ESP within the last 10 years?**	**Is WESP preceded by a quench chamber**	**WESP water flow, gpm**	**Type of alkali added, if any**	**Liquid-to-gas ratio (gal/1000 acfm)**	**Inlet pH of scrubbing liquid**	**Scrubbing fluid make-up rate, gpm**	**For recovery furnaces/combustion units: Does scrubber also serve as a direct contact evaporator?**	**Type of packing material**	**Packing material depth, ft**
Example entry:	activated carbon	Hg	100	Polyester	Shake	15	1	7	8	4	466	No	No	275			8	130	No	plastic packing	3
															Caustic	6	10	60			

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

OMB Control No:
Expiration Date:
Review Draft

Complete this table for add-on air po
UK = Unknown. NA = Not Applica
You do not need to complete this tat

Instruction:		Enter water source and usage information for wet control devices such as wet scrubbers, WESP, mist eliminators, absorbers, etc. Do not include spent pulping liquor used in recovery furnace wet bottom ESPs here (as information for wet bottom ESPs is requested in the *PI Equip detail* tab).	Select yes/no	Enter numeric value in gallons per minute (gpm). Use the average from 2009 or a target value.	Enter the decimal percentage of recirculation gpm flow (e.g., 0.1 for 10%) that is not recalculated back to the control device (i.e., the blowdown percentage). Use the average from 2009 or a target value.	Enter end use or disposal method for the blowdown	Complete the solid material questions for control devices that collect or generate solid material to be handled or disposed. Do not include baghouses or cyclones used solely for wood/material handling operations. Provide information for any solid material collected by the APCD (e.g., PM, sorbent, etc)	Explain how the solid material is used or disposed. Explain where the material re-enters the process if it is reused.	Enter the amount of solid material disposed annually (if known) in cubic yards per year (cu yd/yr). Use the average from 2009 or a target value.	Identify any other solid waste associated with the APCD that must be replaced/disposed periodically (e.g., packing material, ceramic saddles)	Enter the frequency in which the material must be replaced/disposed, etc.	Explain how the solid material is used or disposed. Explain where the material re-enters the process if it is reused.	Enter the amount of material that must be disposed in cubic yards (if known). Use the average from 2009 or a target value.	Select from list or write in. List multiple parameters for the same control device separated by commas (as shown in the example below).	List any operating parameters not included in the previous column
Survey reference:		Water source and usage					Solid material handling and disposal							Parameter monitoring	
Field:	**Scrubber/absorber cross-sectional area, ft²**	**Water source**	**Is water recirculated?**	**Water recirculation rate, gpm**	**Wastewater (blowdown) %**	**Wastewater (blowdown) reuse or disposal method**	**Type of material collected**	**End use/method of disposal for solid material collected**	**Solid material disposed (if known), cu yd/yr**	**Identify any other solid waste associated with the APCD**	**Frequency of material replacement/disposal**	**End use/method of disposal for solid material collected**	**Amount of material to be disposed (if known), cu yd**	**List continuous parameter monitoring systems used for this control device (e.g., pressure drop, liquid flow)**	**Please list below any additional operating parameters that are either monitored or that are important for proper operation of the APCD, and include average values and units.**
Example entry:	19.6	treated wastewater	Yes	200	0.1	Treated in onsite wastewater treatment plant	carbon sorbent laden with PM	landfill onsite	410	degraded packing material	5 yr	landfill offsite	0.5	liquid flow, voltage	carbon injection rate (100 lb/hr)
		surface water and water from recirculation pond	Yes	350	0.35	Treated in onsite wastewater treatment plant								pressure drop, liquid flow rate	
														combustion chamber temperature	

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

OMB Control No:
Expiration Date:
Review Draft

Complete this table for add-on air po
UK = Unknown. NA = Not Applica
You do not need to complete this tat

Instruction:	OPTIONAL: Supply approximate capital costs of the parameter monitoring system equipment installed within the past 10 years for this control device. Include in the equipment costs the analyzer and data acquisition system (DAS), if known.	OPTIONAL: Enter year for parameter monitoring system costs	Supply startup/shutdown information for the equipment that appears in the APCD_ID column. Enter approximately how long it takes for the control device to startup. Use decimals if less than one hour (e.g., 18 minutes = 0.3 hr). Supply information for routine startup and shutdown events such as events associated with planned mill downtime. (Do not provide information for startup/shutdown events associated with control device or emission unit malfunctions). "Startup" means the setting in operation of an affected source or portion of an affected source for any purpose.	Select from menu, expand on menu response, and/or write in. For example, is a certain gas flow rate from the emission unit required before the control device operating parameter limits can be met? Is a certain heating value from the emission unit exhaust gas required to achieve control device temperature?	List any control device parameter limits that cannot be met during control device startup. Certain parameters may be "instant on" while others are more transient in nature. Examples could include control device temperature that must heat up to a set point, or pressure drop that cannot be achieved due to low exhaust gas flow from the emission unit. The EPA is particularly interested in emission limits or parameter limits originating from the pulp and paper NSPS or NESHAP that cannot be met during control device startup or shutdown. Select from menu if the applicable emission and parameter limits are expected to be met during startup.	Write in response (if any).	Write in response specifying when control device startup ends and normal operation begins (e.g., Startup ends when oxidizer temperature set point of 1200F is reached.)	Enter approximately how long it takes for the control device to shutdown. Use decimals if less than one hour (e.g., 18 minutes = 0.3 hr). "Shutdown" means the cessation of operation of an affected source or portion of an affected source for any purpose.	Select from menu, expand on menu response, and/or write in. For example, is a certain gas flow rate from the emission unit required for the control device operating parameter limits to be met? Is a certain heating value from the emission unit exhaust gas required to achieve control device temperature?
Survey reference:			Control Device Startup and Shutdown						
Field:	**Capital costs of parameter monitoring system, $**	**Base year for parameter monitoring system capital cost (e.g., 2005)**	**Approximate duration of control device startup (hours)**	**Explain how control device startup is integrated with (dependent upon) emission unit startup/operation**	**List any control device continuous emissions monitoring or operating parameter limits that cannot be met during control device startup**	**Measures employed to reduce air emissions during control device startup (if any)**	**What marks the end of control device startup and beginning of normal operating conditions?**	**Approximate duration of control device shutdown (hours)**	**Explain how control device shutdown is integrated with (dependent upon) emission unit shutdown**
Example entry:			0.4	Need airflow from emission unit of at least 10,000 acfm in order for injected carbon to properly mix and become entrained in gas stream	carbon injection rate	Ensure water is recirculated through control device throughout startup	route emission unit exhaust damper to control device and switch on carbon injection once process exhaust gas reaches 10,000 acfm	0.4	Need airflow from emission unit of at least 10,000 acfm in order for injected carbon to properly mix and become entrained in gas stream
	34500	2007	3	Control device cannot function as designed unless an air flow rate of 29,000 acfm from the emission unit is achieved.	pressure drop	meet liquid flow parameter limit	Startup ends when the pressure drop parameter limit range is achieved	0.5	Control device cannot function as designed unless an air flow rate of 29,000 acfm from the emission unit is achieved.
	22000	1999	4		temperature set point	bring TO temperature to 1400F before routing NCG or SOG to the TO	Combustion temperature reaches 1400F	4	Control device continues to operate and meets required operating limits while emission unit is shut down or re-routed.

OMB Control No:
Expiration Date:
Review Draft

Complete this table for add-on air po
UK = Unknown. NA = Not Applica
You do not need to complete this tat

Instruction:	List any control device parameter limits that cannot be met during control device shutdown. Certain parameters may be "instant off" while others are more transient in nature. Examples could include control device temperature that decreases from the set point as shutdown progresses, or pressure drop that cannot be achieved due to low exhaust gas flow from the emission unit. The EPA is particularly interested in emission limits or parameter limits originating from the pulp and paper NSPS or NESHAP that cannot be met during control device startup or shutdown. Select from menu if the applicable emission and parameter limits are expected to be met during shutdown.	Select from menu or write in	Write in response specifying when shutdown begins and normal operation ends (e.g., Shutdown begins when the burners are shut off.)	OPTIONAL QUESTION. Input on appropriate standards that would be reasonable for your pulp and paper source category control system is requested. Supply recommendations for the specific APCD appearing in the APCD_ID column.	Optional. Enter any comments you have on the data supplied.
Survey reference:					
Field:	**List any control device continuous emissions monitoring or operating parameter limits that cannot be met during control device startup**	**Measures employed to reduce air emissions during control device shutdown (if any)**	**What marks the end of normal operating conditions and beginning of control device shutdown?**	**Optional: Do you wish to recommend a standard that would apply during startup or shutdown of this control device? If so, please describe the event to which the standard would apply; the recommended standard (this could be an emission limitation, work practice, or operational standard) that would apply during the period; the basis for the recommended standard; why and how the standard would minimize emissions during the event; and how would compliance be determined and/or monitored. Supply as a separate attachment to your survey response if necessary.**	**Comments**
Example entry:	carbon injection rate	Continue injection of carbon until process gas flow drops to 10,000 acfm; continue water recirculation unit emission unit switched off	When process gas flow drops to 10,000 acfm and carbon injection is shut off	Require compliance with liquid flow parameter limit during startup and shutdown (but not carbon injection rate limit)	
		Wait until LK is cooled to 200F before switching off liquid flow.	Shut off liquid flow	Meet liquid flow parameter limits during startup and shutdown (but not the pressure drop drop parameter limit because it can only be achieved during normal operation)	
	temperature set point	Route NCG and/or SOG back to primary control	NCG/SOG re-routed to primary control device	Cease firing NCG or SOG during TO shutdown (route NCG and SOG to primary control device)	

OMB Control No:	xxxx-xxxx
Expiration Date:	xx/xx/xxxx

Review Draft

Did any of the responses (individual cells) you entered in this tab contain CBI?
If yes, be sure to shade the CBI-containing cells red and follow the instructions in section C of the survey overview document for submitting CBI.

Use this table for pulp produced onsite. Do not include pulp purchases in this table.
Mills can have one or more rows in this table depending on the number of pulping processes/lines at the mill.
Complete the columns that are applicable for each pulp type, leaving the inapplicable columns blank.
UK = Unknown. **NA = Not Applicable**. See instruction document for details on use of these terms.
Provide data for the 2009 operating year.

Instruction:	Provide for all entries. This should match NEI Site ID used in Part II.	Select from menu. Include additional rows in this table if your mill has more than one pulping line/process (e.g., two kraft lines or one kraft line and one TMP line).	Enter numeric value for 2009	Enter numeric value in air dried tons of pulp per day (ADTP/d). This value corresponds to pulp production exiting the pulping line and prior to any bleaching/brightening.	Enter decimal percent for utilization (e.g., 0.7 for 70% of capacity utilized)	Enter the typical decimal percent for utilization (e.g., 0.7 for 70% of capacity utilized) for the past 5 years. One way to determine the 5-year utilization would be to average the utilization percentages for 2005, 2006, 2007, 2008, and 2009.	Virgin wood fiber sources.	Select yes/no to indicate virgin fiber source(s) used		Virgin wood fiber (approximate decimal percent across all virgin wood fiber sources)		How does the mill use the unbleached pulp it produces from virgin wood fiber? Determine the approximate decimal percentage requested based on annual unbleached pulp capacity (ADTP/yr). This column represents the amount of unbleached pulp that typically goes to an onsite bleaching/brightening line.
Survey reference:	Pulping line identification						Virgin wood fiber sources used for chemical or mechanical wood pulps					
Field:	**NEI Site ID**	**Pulping processes**	**Operating hr/yr**	**Unbleached pulp nominal daily production capacity ADTP/d in 2009**	**Unbleached pulp nominal capacity utilization percentage in 2009**	**5-year average (2005-2009) unbleached pulp capacity utilization percentage**	**Chips produced onsite**	**Chips produced offsite**	**Sawmill residues**	**Virgin SW decimal %**	**Virgin HW decimal%**	**Approximate percentage of virgin wood pulp that is bleached (or brightened) onsite**
Example entry:	99999	kraft	8500	950	0.8	0.95	yes	yes	no	0.2	0.8	NA
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
32												
33												
34												
35												
36												
37												
38												
39												
40												
41												
42												
43												
44												
45												
46												
47												
48												
49												
50												

OMB Control No:
Expiration Date:
Review Draft

Use this table for pulp produced onsite
Mills can have one or more rows in thi
Complete the columns that are applica
UK = Unknown. **NA = Not Applicab**
Provide data for the 2009 operating y

Instruction:	This column represents the amount of unbleached pulp that is sold (or transferred to another mill within the same company) as unbleached market pulp. Decimal percent.	This column represents the amount of unbleached pulp that is used onsite to manufacture unbleached paper/paperboard. Decimal percent.		Select yes/no	Specify the recycled material used for secondary fiber pulping.	Provide approximate decimal percentages of secondary fiber capacity (ADTP/yr supplied to the left).			How does the mill use the pulp it produces from secondary fiber? Determine the approximate decimal percentage requested based on annual unbleached pulp capacity (ADTP/yr). This column represents the amount of unbleached pulp that typically goes to an onsite bleaching/brightening line.	This column represents the amount of unbleached pulp that is sold (or transferred to another mill within the same company) as unbleached market pulp. Decimal percent.	This column represents the amount of unbleached pulp that is used onsite to manufacture unbleached paper/paperboard. Decimal percent.
Survey reference:				Mechanical wood pulps	Recycled/secondary fiber pulps						
Field:	**Approximate percentage of virgin wood pulp sold as unbleached market pulp**	**Approximate percentage of virgin wood pulp used onsite to manufacture unbleached paper/paperboard?**	Check (=1)	**For TMP or pressurized groundwood systems, is a heat recovery system used?**	**Mixed paper decimal%**	**High grade deinked decimal%**	**ONP decimal% OCC decimal%**	**Pulp substitute decimal%**	**Approximate percentage of secondary fiber pulp that is bleached (or brightened) onsite**	**Approximate percentage of secondary fiber pulp sold as unbleached market pulp**	**Approximate percentage of secondary fiber pulp used onsite to manufacture unbleached paper/paperboard?**
Example entry:	0.25	0.75	1								
1											
2			0								
3			0								
4			0								
5			0								
6			0								
7			0								
8			0								
9			0								
10			0								
11			0								
12			0								
13			0								
14			0								
15			0								
16			0								
17			0								
18			0								
19			0								
20			0								
21			0								
22			0								
23			0								
24			0								
25			0								
26			0								
27			0								
28			0								
29			0								
30			0								
31			0								
32			0								
33			0								
34			0								
35			0								
36			0								
37			0								
38			0								
39			0								
40			0								
41			0								
42			0								
43			0								
44			0								
45			0								
46			0								
47			0								
48			0								
49			0								
50			0								

OMB Control No:
Expiration Date:
Review Draft

Use this table for pulp produced onsite
Mills can have one or more rows in thi
Complete the columns that are applica
UK = Unknown. **NA = Not Applicab**
Provide data for the 2009 operating ye

Instruction:		Non-wood pulping material. Select from list	How does the mill use the non-wood pulp it produces? Determine the approximate decimal percentage requested based on annual unbleached pulp capacity (ADTP/yr). This column represents the amount of unbleached pulp that typically goes to an onsite bleaching/brightening line.	This column represents the amount of unbleached pulp that is sold (or transferred to another mill within the same company) as unbleached market pulp.	This column represents the amount of unbleached pulp that is used onsite to manufacture unbleached paper/paperboard.		Optional. Enter any comments you have on the data supplied.
Survey reference:		Non-wood pulps					
Field:	Check (=1)	**Non-wood material**	**Approximate percentage of nonwood pulp that is bleached (or brightened) onsite**	**Approximate percentage of nonwood pulp sold as unbleached market pulp**	**Approximate percentage of nonwood pulp used onsite to manufacture unbleached paper/paperboard?**	Check (=1)	**Comments**
Example entry:	0					0	
1							
2	0					0	
3	0					0	
4	0					0	
5	0					0	
6	0					0	
7	0					0	
8	0					0	
9	0					0	
10	0					0	
11	0					0	
12	0					0	
13	0					0	
14	0					0	
15	0					0	
16	0					0	
17	0					0	
18	0					0	
19	0					0	
20	0					0	
21	0					0	
22	0					0	
23	0					0	
24	0					0	
25	0					0	
26	0					0	
27	0					0	
28	0					0	
29	0					0	
30	0					0	
31	0					0	
32	0					0	
33	0					0	
34	0					0	
35	0					0	
36	0					0	
37	0					0	
38	0					0	
39	0					0	
40	0					0	
41	0					0	
42	0					0	
43	0					0	
44	0					0	
45	0					0	
46	0					0	
47	0					0	
48	0					0	
49	0					0	
50	0					0	

OMB Control No:	xxxx-xxxx
Expiration Date:	xx/xx/xxxx

Did any of the responses (individual cells) you entered in this tab contain CBI?
If yes, be sure to shade the CBI-containing cells red and follow the instructions in section C of the survey overview document for submitting CBI.

Review Draft

UK = Unknown. **NA = Not Applicable**. See instruction document for details on use of these terms.
Each pulp mill producing turpentine and/or tall oil should have one row in this table.

Instruction:	Provide for all entries. This should match NEI Site ID used in Part II.	Enter numeric value based on nominal production capacity	Enter numeric value based on nominal production capacity	Insert Emission Unit IDs separated by commas	Enter numeric value based on nominal production capacity	
Survey reference:		Turpentine			Tall oil	
Field:	**NEI Site ID**	**Turpentine production, hr/yr**	**Turpentine production, gal/yr**	**Digesters supplying turpentine production (insert Emission Unit IDs)**	**Tall oil production, ton tall oil/yr**	**Evaporators supplying tall oil production (insert Emission Unit IDs)**
Example entry:	99999	8500	700	DIG-1, DIG-2	220000	EVAP-1, EVAP-2
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						
48						
49						
50						

OMB Control No:
Expiration Date:
Review Draft

UK = Unknown. **NA = Not Applicable**. S
Each pulp mill producing turpentine and/o

Instruction:	Select from menu.	Enter numeric value (if batch)	Enter numeric value (if batch)	Enter numeric value based on nominal production capacity (if continuous)	Enter numeric value (if continuous)	Optional. Enter any comments you have on the data supplied.
Survey reference:						
Field:	**Is tall oil acidulation reactor batch or continuous?**	**Batch reactor cycle time (hr)**	**Typical batch reactor cycles per day**	**Continuous or batch tall oil reactor operation, day/yr**	**Continuous tall oil reactor nominal production capacity, tons tall oil per hour**	**Comments**
Example entry:	continuous			365	25	
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						
48						
49						
50						

OMB Control No: xxxx-xxxx
Expiration Date: xx/xx/xxxx
Review Draft

If any of the responses (individual cells) you entered in this tab contain CBI?
If yes, be sure to shade the CBI-containing cells red and follow the instructions in section C of the survey overview document for submitting CBI.

UK = Unknown. NA = Not Applicable. See instruction document for details on use of these terms.

This tab does not apply for synthetic area sources.

Instruction:	Provide for all entries. This should match NEI Site ID used in Part II.	The kraft condensate streams covered under subpart S are "named" in §63.446(b). Select from menu the source of each "named" kraft condensate stream (digester, turpentine recovery, evaporator, HVLC, or LVHC systems). Select "Combined systems" if you wish to describe combined condensate streams from multiple "named" sources (e.g., combined digester and evaporator condensates). Select "Other systems" to describe condensate streams that are un-named (i.e., not listed in §63.446(b)) but are controlled to meet subpart S as part of an innovative or equivalency-by-permit project.	Enter Emission Unit ID(s) or Collection system ID(s) (matching the *PI Equip* detail tab) that are associated with the condensate stream	Select from menu (Yes, No, Partially). If "No" complete question II. If "Yes" complete questions III-VII to specify the applicable method of condensate treatment. If "Partially" complete question II for the uncontrolled portion of the condensate stream; and complete questions III-VII for the controlled portion of the condensate stream.	Mills may either collect/control all "named" kraft pulping condensates, or employ one of the volume reduction options are specified in subpart S at §63.446(c)(2) or (3). Mills may also comply with subpart S through equivalency-by-permit. Select from the following codes to describe why certain "named" condensate streams (or portions of these streams) are uncollected/uncontrolled: 1 - Mill collects/controls pulping process condensate streams containing a combined total of at least 65 percent of the total HAP mass from each digester system, turpentine recovery system, and evaporator system according to 63.446(c)(2). 2A - Mill collects/controls pulping process condensate streams containing a combined total of at least 7.2 lb total HAP/ton ODP, according to 63.446(c)(3), for mills that DO NOT perform bleaching. 2B -Mill collects/controls pulping process condensate streams containing a combined total of at least 11.1 lb total HAP/ton ODP, according to 63.446(c)(3), for mills that perform bleaching. C - Mills uses equivalency-by-permit or other means of compliance for the "named" streams.	Specify Emission Unit ID(s)	Select from menu. Control options are described in the survey overview document.	Include the date/result from your most recent compliance demonstration. You may enter the date/results from more than one compliance demonstration (e.g., initial and subsequent demonstrations as shown in the example). If necessary, submit results for multiple compliance demonstrations in a separate attachment.		Select from menu. Control options are described in the survey instruction document.	Include the date/result from your most recent compliance demonstration. You may enter the date/results from more than one compliance demonstration (e.g., initial and subsequent demonstrations as shown in the example). If necessary, submit results for multiple compliance demonstrations in a separate attachment.	Note: If an onsite wastewater treatment plant is used for biological treatment of kraft condensates, then in addition to the question below, you are asked in the WW tab to supply the results of the four quarterly tests conducted in calendar year 2009.	Write in condensate treatment method (e.g., wastewater thermal oxidizer)	Select from menu. Control options are described in the survey instructiondocument.	Include the date/result from your most recent compliance demonstration. You may enter the date/results from more than one compliance demonstration (e.g., initial and subsequent demonstrations as shown in the example). If necessary, submit results for multiple compliance demonstration in a separate attachment.		Complete this question if multiple methods are used to treat the condensate (for example, usually steam stripping but biological treatment when the steam stripper is down). Pick from the menu and write in a description of how the different treatment methods are used.	Enter any comments that you may have regarding the data supplied in this table.
Survey reference:				I		III - recycling		IV - stripping			V - biological treatment			VI - other treatment methods				VII - multiple treatment methods	
Field:	**NEI Site ID**	**Kraft condensate stream**	**Emission Unit IDs (or Collection System IDs for HVLC or LVHC systems)**	**Is condensate stream collected and treated according to subpart S?**	**Indicate volume reduction option being used, or other reason why condensate stream is not collected and controlled**	**For condensates treated by recycling to equipment meeting the kraft pulping system vent standards, specify the equipment Emission Unit ID receiving recycled condensates.**	**For condensates treated by steam stripping, specify the control option used**	**Date of compliance demonstration(s)**	**Compliance test results (include units)**	**For condensates treated by biological treatment, specify the control option used**	**Date of compliance demonstration(s)**	**Compliance test results (include units)**	**Specify condensate treatment method (if other than steam stripping or biological treatment)**	**Specify the control option used**	**Date of compliance demonstration(s)**	**Compliance test results (include units)**	**Please describe if multiple treatment methods used for this condensate**	**Comments**
Example entry:	99999	Digester systems	DIG-1, DIG-2	N	2B													
	99999	Combined systems	DIG-3, LVHC-1, HVLC	Y						92% total HAP reduction (by weight)	6/30/2009	94%						
	99999	Evaporator systems	EVAP-1	Y		WASHER	Remove 10.2 pounds/ton ODP	(1) 3/29/2001; (2) 5/15/2007	(1) Removed 15.7 lb HAP/ton ODP; (2) Removed 12.3 lb HAP/ton ODP	Remove 10.2 pounds/ton ODP	NA	NA					As backup: Biological treatment is used as a backup when the steam stripper is not performing as required	

Field:	NEI Site ID	Kraft condensate stream	Emission Unit IDs (or Collection System IDs for HVLC or LVHC systems)	Is condensate stream collected and treated according to subpart S?	Indicate volume reduction option being used, or other reason why condensate stream is not collected and controlled	For condensates treated by recycling to equipment meeting the kraft pulping system vent definition, identify the equipment (emission unit ID) receiving recycled condensates.	For condensates treated by steam stripping, specify the control option used	Date of compliance demonstration(s)	Compliance test results (include units)	For condensates treated by biological treatment, specify the control option used	Date of compliance demonstration(s)	Compliance test results (include units)	Specify condensate treatment method (if other than steam stripping or biological treatment)	Specify the control option used	Date of compliance demonstration(s)	Compliance test results (include units)	Please describe if multiple treatment methods used for this condensate	Comments
163																		
164																		
165																		
166																		
167																		
168																		
169																		
170																		
171																		
172																		
173																		
174																		
175																		
176																		
177																		
178																		
179																		
180																		
181																		
182																		
183																		
184																		
185																		
186																		
187																		
188																		
189																		
190																		
191																		
192																		
193																		
194																		
195																		
196																		
197																		
198																		
199																		
200																		
201																		
202																		
203																		
204																		
205																		
206																		
207																		
208																		
209																		
210																		
211																		
212																		
213																		
214																		
215																		
216																		
217																		
218																		
219																		
220																		
221																		
222																		
223																		
224																		
225																		
226																		
227																		
228																		
229																		
230																		
231																		
232																		
233																		
234																		
235																		
236																		
237																		
238																		
239																		
240																		
241																		
242																		
243																		
244																		
245																		
246																		
247																		
248																		
249																		
250																		
251																		
252																		
253																		
254																		
255																		
256																		
257																		
258																		
259																		
260																		
261																		
262																		
263																		
264																		
265																		
266																		
267																		
268																		
269																		
270																		
271																		
272																		
273																		
274																		
275																		
276																		
277																		
278																		
279																		
280																		
281																		
282																		
283																		
284																		
285																		
286																		
287																		
288																		
289																		
290																		
291																		
292																		
293																		
294																		
295																		
296																		
297																		
298																		
299																		
300																		
301																		
302																		
303																		
304																		
305																		
306																		
307																		
308																		
309																		
310																		
311																		
312																		
313																		
314																		
315																		
316																		
317																		
318																		
319																		
320																		
321																		
322																		
323																		
324																		
325																		
326																		
327																		
328																		
329																		
330																		
331																		
332																		
333																		
334																		
335																		
336																		
337																		
338																		
339																		
340																		
341																		
342																		
343																		
344																		
345																		
346																		
347																		
348																		
349																		
350																		

Field:	NEI Site ID	Kraft condensate stream	Emission Unit IDs (or Collection System IDs for HVLC or LVHC systems)	Is condensate stream collected and treated according to subpart S?	Indicate volume reduction option being used, or other reason why condensate stream is not collected and controlled	For condensates treated by recycling to equipment meeting the kraft pulping system vent definition, identify the equipment (emission unit ID) receiving recycled condensates.	For condensates treated by steam stripping, specify the control option used	Date of compliance demonstration(s)	Compliance test results (include units)	For condensates treated by biological treatment, specify the control option used	Date of compliance demonstration(s)	Compliance test results (include units)	Specify condensate treatment method (if other than steam stripping or biological treatment)	Specify the control option used	Date of compliance demonstration(s)	Compliance test results (include units)	Please describe if multiple treatment methods used for this condensate	Comments
351																		
352																		
353																		
354																		
355																		
356																		
357																		
358																		
359																		
360																		
361																		
362																		
363																		
364																		
365																		
366																		
367																		
368																		
369																		
370																		
371																		
372																		
373																		
374																		
375																		
376																		
377																		
378																		
379																		
380																		
381																		
382																		
383																		
384																		
385																		
386																		
387																		
388																		
389																		
390																		
391																		
392																		
393																		
394																		
395																		
396																		
397																		
398																		
399																		
400																		
401																		
402																		
403																		
404																		
405																		
406																		
407																		
408																		
409																		
410																		
411																		
412																		
413																		
414																		
415																		
416																		
417																		
418																		
419																		
420																		
421																		
422																		
423																		
424																		
425																		
426																		
427																		
428																		
429																		
430																		
431																		
432																		
433																		
434																		
435																		
436																		
437																		
438																		
439																		
440																		
441																		
442																		
443																		
444																		
445																		
446																		
447																		
448																		
449																		
450																		
451																		
452																		
453																		
454																		
455																		
456																		
457																		
458																		
459																		
460																		
461																		
462																		
463																		
464																		
465																		
466																		
467																		
468																		
469																		
470																		
471																		
472																		
473																		
474																		
475																		
476																		
477																		
478																		
479																		
480																		
481																		
482																		
483																		
484																		
485																		
486																		
487																		
488																		
489																		
490																		
491																		
492																		
493																		
494																		
495																		
496																		
497																		
498																		
499																		
500																		

Field:	NEI Site ID	Kraft condensate stream	Emission Unit IDs (or Collection System IDs for HVLC or LVHC systems)	Is condensate stream collected and treated according to subpart S?	Indicate volume reduction option being used, or other reason why condensate stream is not collected and controlled	For condensates treated by recycling to equipment meeting the kraft pulping system vent standards, specify the equipment receiving recycled condensates.	For condensates treated by steam stripping, specify the control option used	Date of compliance demonstration(s)	Compliance test results (include units)	For condensates treated by biological treatment, specify the control option used	Date of compliance demonstration(s)	Compliance test results (include units)	Specify condensate treatment method (if other than steam stripping or biological treatment)	Specify the control option used	Date of compliance demonstration(s)	Compliance test results (include units)	Please describe if multiple treatment methods used for this condensate	Comments
																1- Mill collects/controls pulping process condensate streams containing a combined total of at least 65 percent of the total HAP mass from each digester system, turpentine recovery system, and evaporator system according to 63.446(e)(2). 2A - Mill collects/controls pulping process condensate streams containing a combined total of at least 7.2 lb total			

OMB Control No: xxxx-xxxx
Expiration Date: xx/xx/xxxx
Review Draft

Did any of the responses (individual cells) you entered in this tab contain CBI?
If yes, be sure to shade the CBI-containing cells red and follow the instructions in section C of the survey overview document for submitting CBI.

Complete this spreadsheet tab once for each set of CCA compliance calculations used by a mill. As an alternative to completing this tab, you may submit documentation of your CCA calculations used for purposes of showing compliance.
You will have 1 row of data in the left-hand table of this tab (emission balance), and multiple rows in the right-hand table in this tab (CCA equipment list). This tab does not apply for synthetic area sources.

Notes:
Sources eligible for inclusion in the CCA as credit generators include (but are not limited to): pulping systems, bleaching systems, causticizing systems, papermaking systems, and wastewater treatment systems.
Debit generating sources can include equipment from the kraft mill HVLC system, including: pulp washing systems, knotter systems, screen systems, decker systems, O2 delignification systems, and weak liquor storage tanks.
Refer to the system definitions in subpart S at §§63.441 and 63.447(a). If equipment other than that listed above is included in your CCA calculations, please include that equipment in the tab.
EPA is not requesting detailed calculations used to show compliance with the CCA at this time. However, EPA reserves the right to request additional detail if needed as a follow-up to this survey.
UK = Unknown. **NA = Not Applicable**. See instruction document for details on use of these terms.

Emissions Balance Your response will consist of one row on this left side of the orange line.

Instruction:	Provide for all entries. This should match NEI Site ID used in Part II.	Baseline emissions are measured after compliance has been achieved with the kraft pulping process condensate standards, and the revised effluent limitations guidelines and standards in 40 CFR 430 subpart B. The baseline HAP emissions are determined according to §63.447(d).	HAP emission reductions from baseline are required to be determined in §63.447(e).			
Survey reference:						
Field:	**NEI Site ID**	**Baseline emissions (kg total HAP/Mg ODP)**	**Emission reductions expected through compliance with the CCA (kg total HAP/Mg ODP)**	**Year compliance last demonstrated using CCA**	**How many times has the mill changed the CCA compliance strategy (e.g., changed debit or credit emission points) since first demonstrating compliance with the CCA? Please indicate the year(s) of the change(s).**	
Example entry:	99999	0.68	0.34	2007	once - 2007	

CCA Equipment List Your response will consist of multiple rows on this right side of the orange line.

Instruction:	Your response will be multiple rows on this side of the orange line	Complete for each emissions unit involved in a CCA calculation. List each emission unit on a separate row and indicate whether it generates debits or credits in the CCA calculation.	Select from menu	List control technology for credit-generating emission units. If applicable, list technology applied for under-controlled debit-generating units as well.	List parameters	Optional. Enter any comments you have on the data supplied.
Survey reference:						
Field:	**NEI Site ID**	**Emission Unit ID**	**CCA debit or credit generating emission point?**	**Clean condensate alterative technology applied**	**Parameters monitored for clean condensate alterative technology**	**Comments**
Example entry:	99999	BSW1	debit (uncontrolled)	NA-debit source		
	99999	PM2	credit	other - maintain paper machine white water methanol concentration below 20 mg/l by draining a portion of the methanol-concentrated liquid from the pulp stock and replacing it with cleaner water	paper machine throughput; and methanol concentration (mg/l) in the stock blend tanks (SBT3), machine chest (PM2MC), and save-all (SVT)	

OMB Control No: xxxx-xxxx
Expiration Date: xx/xx/xxxx
Review Draft

Did any of the responses (individual cells) you entered in this tab contain CBI?
If yes, be sure to shade the CBI-containing cells red and follow the instructions in section C of the survey overview document for submitting CBI.

Include one row for each bleaching or brightening line located at your mill. Some mills will have only one row, while other mills will have a few rows.
For example, a mill that produces bleached chemical pulp, bleached secondary fiber pulp, and brightened mechanical pulp could include three rows (one for each type of pulp that is bleached/brightened using separate bleaching/brightening processes).
UK = Unknown. **NA = Not Applicable**. See instruction document for details on use of these terms.
Note: The terms "bleaching" and "brightening" should be viewed as interchangeable in this tab (e.g., "Bleaching" can also be read as "Brightening").

Instruction:	Provide for all entries. This should match NEI Site ID used in Part II.	This section (to the left of the orange line) is to be completed by all mills that perform any type of bleaching or brightening.	Select yes/no	Select yes/no	Select from menu. Please explain if the bleaching process cannot be characterized as ECF, PCF, or TCF.	Use the following bleaching sequence notation: C-Chlorine (Cl2) D-Chlorine dioxide (ClO2) E-Alkaline extraction (NaOH etc) P-Hydrogen Peroxide (H2O2) O-Oxygen (O2) H-Hypochlorite (NaClO) Z-Ozone (O3) M-Monox-L X-Enzyme (xylanase) S-Sodium hydrosulfite (Na2S2O4) SO2-SO2 Add other notation for bleaching/brightening stages not represented above.	Enter numeric value	Enter numeric value for air dried tons of bleached pulp per day (ADTBP/d)	How does the mill use the bleached pulp produced? Determine the approximate decimal percentage requested based on annual bleached pulp capacity (ADTBP/yr). This column represents the amount of bleached pulp that is sold (or transferred to another mill within the same company) as bleached market pulp.	This column represents the amount of bleached pulp that is used onsite to manufacture bleached paper/paperboard.	
Survey reference:											
Field:	**NEI Site ID**	**Bleaching line ID (if applicable)**	**Are chlorine or chlorinated compounds used in any stage of the bleaching line?**	**Is the bleaching line preceded by O2 delignification?**	**Is the process ECF, PCF or TCF?**	**Bleaching sequence**	**Bleach line operating hr/yr**	**2009 nominal daily bleached production capacity, ADTBP/d**	**Approximate decimal percentage of bleaching line capacity sold as bleached market pulp**	**Approximate decimal percentage of bleaching line capacity used to manufacture paper or paperboard onsite**	**Check (=1)**
Example entry:	99999	B1	yes	yes	ECF - elemental chlorine free	DED(DOP)	8500	16	0.15	0.85	1
1											
2											0
3											0
4											0
5											0
6											0
7											0
8											0
9											0
10											0
11											0
12											0
13											0
14											0
15											0
16											0
17											0
18											0
19											0
20											0
21											0
22											0
23											0
24											0
25											0
26											0
27											0
28											0
29											0
30											0
31											0
32											0
33											0
34											0
35											0
36											0
37											0
38											0
39											0
40											0
41											0
42											0
43											0
44											0
45											0
46											0
47											0
48											0
49											0
50											0

OMB Control No:
Expiration Date:
Review Draft

Include one row for each bleach
For example, a mill that produc
UK = Unknown. **NA = Not Ap**
Note: The terms "bleaching" ar

Instruction:	This section (to the right of the orange line) is to be completed for bleaching systems that use any chlorine or chlorinated compounds. Select from list	Select yes/no	Each bleaching stage includes the tower vent, washer hood, seal tank vent, chemical and steam mixers, and vacuum pumps. Enter the APCD_ID for the control method. In some cases the same control device (and the same APCD_ID) will apply for multiple stages. Describe the control system (using any relevant APCD_IDs) if only portions of the bleaching stage vent gases are controlled. Enter "NA" not applicable if no control is used.	Select from list	Select from list	Select yes/no	Each bleaching stage includes the tower vent, washer hood, seal tank vent, chemical and steam mixers, and vacuum pumps Select from list	Select from list	Select from list	Select yes/no	Each bleaching stage includes the tower vent, washer hood, seal tank vent, chemical and steam mixers, and vacuum pumps
Survey reference:											
Field:	**Material type**	**Does stage 1 use chlorine or chlorinated compounds?**	**Stage 1 control method**	**Stage 1 chloroform control option(s) used to demonstrate subpart S compliance**	**Stage 1 chlorinated HAP control option used to demonstrate subpart S compliance**	**Does stage 2 use chlorine or chlorinated compounds?**	**Stage 2 control method**	**Stage 2 chloroform control option(s) used to demonstrate subpart S compliance**	**Stage 2 chlorinated HAP control option used to demonstrate subpart S compliance**	**Does stage 3 use chlorine or chlorinated compounds?**	**Stage 3 control method**
Example entry:	mixture of HW and SW	Yes	SCBR_BL1	Meet effluent guidelines/standards	99% reduction (by weight) measured as total chlorinated HAP	No	SCBR_BL2	NA (no chlorine or chlorinated compounds used in this stage)	NA (no chlorine or chlorinated compounds used in this stage)	Yes	SCBR_BL1
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											
26											
27											
28											
29											
30											
31											
32											
33											
34											
35											
36											
37											
38											
39											
40											
41											
42											
43											
44											
45											
46											
47											
48											
49											
50											

OMB Control No:
Expiration Date:
Review Draft

Include one row for each bleach
For example, a mill that produc
UK = Unknown. **NA = Not Ap**
Note: The terms "bleaching" ar

Instruction:	Select from list	Select from list	Select yes/no	Each bleaching stage includes the tower vent, washer hood, seal tank vent, chemical and steam mixers, and vacuum pumps	Select from list	Select from list	Select yes/no	Each bleaching stage includes the tower vent, washer hood, seal tank vent, chemical and steam mixers, and vacuum pumps	Select from list	Select from list	Select yes/no
Survey reference:											
Field:	**Stage 3 chloroform control option(s) used to demonstrate subpart S compliance**	**Stage 3 chlorinated HAP control option used to demonstrate subpart S compliance**	**Does stage 4 use chlorine or chlorinated compounds?**	**Stage 4 control method**	**Stage 4 chloroform control option(s) used to demonstrate subpart S compliance**	**Stage 4 chlorinated HAP control option used to demonstrate subpart S compliance**	**Does stage 5 use chlorine or chlorinated compounds?**	**Stage 5 control method**	**Stage 5 chloroform control option(s) used to demonstrate subpart S compliance**	**Stage 5 chlorinated HAP control option used to demonstrate subpart S compliance**	**Does stage 6 use chlorine or chlorinated compounds?**
Example entry:	Meet effluent guidelines/standards	99% reduction (by weight) measured as total chlorinated HAP	Yes	SCBR_BL2	Meet effluent guidelines/standards	Outlet concentration < 10 ppmv measured as methanol					
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											
26											
27											
28											
29											
30											
31											
32											
33											
34											
35											
36											
37											
38											
39											
40											
41											
42											
43											
44											
45											
46											
47											
48											
49											
50											

OMB Control No:
Expiration Date:
Review Draft

Include one row for each bleach
For example, a mill that produc
UK = Unknown. **NA = Not Ap**
Note: The terms "bleaching" ar

Instruction:	Each bleaching stage includes the tower vent, washer hood, seal tank vent, chemical and steam mixers, and vacuum pumps	Select from list	Select from list	Select from list or write in description. Select "NA" if ClO2 bleaching is not performed at the mill. Select "None" if ClO2 bleaching is performed but no measures are employed to reduce CO emissions. Otherwise, describe process or control measure used to reduce CO emissions.	Optional. Enter any comments you have on the data supplied.
Survey reference:					
Field:	**Stage 6 control method**	**Stage 6 chloroform control option(s) used to demonstrate subpart S compliance**	**Stage 6 chlorinated HAP control option used to demonstrate subpart S compliance**	**For mills that use chlorine dioxide (ClO2) bleaching, describe any process or control measures used to reduce emissions of carbon monoxide (CO) from bleaching processes.**	**Comments**
Example entry:				None (no CO control measure)	

OMB Control No: xxxx-xxxx
Expiration Date: xx/xx/xxxx
Review Draft

Did any of the responses (individual cells) you entered in this tab contain CBI?
If yes, be sure to shade the CBI-containing cells red and follow the instructions in section C of the survey overview document for submitting CBI.

Provide data for the 2009 operating year. Do not include pulp dryers in this tab.
UK = Unknown. **NA = Not Applicable**. See instruction document for details on use of these terms.
Include one (or more) rows for each paper machine. You may include multiple rows for each paper machine if needed to reflect information that varies considerably by major paper grade, copying down information that does not vary (or remains adequately representative) from row to row.

Instruction:	Provide for all entries. This should match NEI Site ID used in Part II.	Complete table for operable paper machines located at any type of mill. You may need to specify the same paper machine in multiple rows if the machine produces multiple grades of paper at different times (see instructions).	Select paper machine configuration from the menu or write in	Select from menu	Specify the approximate fiber makeup of each paper machine furnish. Indicate the makeup by showing an approximate percentage in decimal form (e.g., enter 0.65 for 65% softwood kraft). You may specify a range (e.g., 0.6-0.7) if there is variation within a main paper grade.								
Survey reference:					Pulp types used								
Field:	**NEI Site ID**	**Paper machine Emission Unit ID**	**Type of paper machine as currently configured**	**Is furnish mixture bleached or unbleached?**	**Hardwood kraft %**	**Softwood kraft %**	**Soda %**	**Sulfite %**	**Dissolving/ specialty pulp %**	**Semichemical pulp %**	**Hardwood mechanical/ groundwood %**	**Softwood mechanical/ groundwood %**	**Secondary fiber %**
Example entry:	99999	PM1	Fourdrinier	bleached	0.2	0.65							0.15
	99999	PM1	Fourdrinier	bleached	0.3-0.4	0.6-0.7							
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													
23													
24													
25													
26													
27													
28													
29													
30													
31													
32													
33													
34													
35													
36													
37													
38													
39													
40													
41													
42													
43													
44													
45													
46													
47													
48													
49													
50													

OMB Control No:
Expiration Date:
Review Draft

Provide data for the 200
UK = Unknown. **NA = I**
Include one (or more) ro

Instruction:		Indicate the other pulp type(s) followed by its approximate decimal percentage (e.g., softwood semichem - 0.10)	Select from menu the most closely related paper grade(s) produced by the paper machine. If multiple paper grades are produced on the same machine, add the additional paper grade(s) in separate rows for the paper machine. Add rows for the major paper grades listed in the pull down menu only (not for every single minor variation within every major paper grade).	Enter paper machine nominal production capacity in air dried tons paper/day (ADT/d)	Specify high density pulp storage (stock chest) consistency in decimal form (e.g., enter 0.15 for 15%). Leave blank for bleached pulp.	Select yes/no. If yes, please include an explanation. Leave blank for bleached pulp.	Specify the headbox consistency in decimal form (e.g., enter 0.001 for 0.1%)	Enter the numeric value for the white water recirculation rate in gallons per oven dried ton of pulp (gal/ODTP). This is the amount of recirculated white water added to the pulp stock prior to the paper machine headbox/wet end.	Provide typical white water methanol concentration in milligrams per liter (mg/l) if it has been measured. HAP concentrations at the paper machine wet end are of interest.	Provide typical white water acetaldehyde concentration in milligrams per liter (mg/l) if it has been measured	Specify HAPs and concentrations if known. You may provide documentation of typical white water HAP concentrations (if measured) as a separate attachment to your survey response.
Survey reference:			Paper machine details								
Field:	**Non-wood fiber %**	**Other % (specify)**	**Paper grade produced**	**Nominal production capacity, ADT/d**	**For unbleached pulps, what is the consistency of pulp in high density storage (%)?**	**For unbleached pulps, has the mill taken steps (e.g., installed a screw press) to raise the consistency of the pulp in high density storage in order to reduce emissions associated with the fluid in the unbleached pulp?**	**What is the consistency of pulp entering the paper machine (%)?**	**White water recirculation rate, gal/ODTP**	**White water methanol concentration, mg/l (if known)**	**White water acetaldehyde concentration, mg/l (if known)**	**White water other HAP concentration, mg/l (if known)**
Example entry:			coated free sheet	935			0.001	48,300	28	UK	UK
			uncoated free sheet	1050			0.001	48,300	28	UK	UK
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											
26											
27											
28											
29											
30											
31											
32											
33											
34											
35											
36											
37											
38											
39											
40											
41											
42											
43											
44											
45											
46											
47											
48											
49											
50											

OMB Control No:
Expiration Date:
Review Draft

Provide data for the 200
UK = Unknown, **NA = I**
Include one (or more) ro

Instruction:	Enter description. Examples may include: measures to reduce organics in the pulp stock liquid or white water (e.g., use of clean condensates in final stage of pulp washing); or switching to non-HAP or reduced-HAP additives. Note Emission Unit ID of stripper if used to strip organics from the paper machine white water (or pulping liquid). Strippers should be included in the Equip detail tab.	Enter the number of vents/stacks on the paper machine wet end (e.g., forming and press sections, and other portions of paper machine prior to first dryer) that vent to the atmosphere. Count vents ducted together prior to release to the atmosphere as one vent (e.g., count 4 vacuum system vents ducted together prior to release to the atmosphere as one vent stack).	Enter the total exhaust gas flow rate from the wet end vents/stacks in actual cubic feet per minute (if known)	Specify APCD_ID from the *PI Controls* tab, if applicable (e.g., if an APCD is used on wet end vent gases).	Enter number of dryer steam cylinders	Select air dryer firing method from menu or write in. Air dryers are direct fired or indirect-fired (use steam-to-air heat exchangers to produce a hot air stream that is forced over the surface of the paper). Hoods are used to contain and route the air flow. Air dryers tend to be used on lighter weights of paper, such as tissues, and to supplement the drying of steam cylinders.	Enter the number of vents/stacks on the paper machine associated with the paper machine dryer(s). Count vents ducted together prior to release to the atmosphere as one vent (e.g., count 4 dryer system vents ducted together prior to release to the atmosphere as one vent stack).	Enter the total exhaust gas flow rate from the dryer vents/stacks in actual cubic feet per minute (if known)	Specify APCD_ID from the *PI Controls* tab if applicable (e.g., if an APCD is used on dry end vent gases)
Survey reference:									
Field:	**Describe any process improvements used to reduce HAP emissions from the wet end**	**Number of vents/stacks on the wet end**	**Total exhaust gas flow rate from the wet end vents/stacks, acfm (if known)**	**Add-on air pollution controls used to reduce HAP emissions from the wet end (insert APCD_IDs)**	**Number of dryer steam cylinders**	**Indicate firing method and fuel type if air drying is used**	**Number of dryer vents/stacks**	**Total exhaust gas flow rate from the dryer vents/stacks, acfm (if known)**	**Add-on air pollution controls used to reduce HAP emissions from the dryers (insert APCD_IDs)**
Example entry:		16	456,000		50	steam-heated (indirect-fired)	4	90,000	
		16	456,000		50	steam-heated (indirect-fired)	4	90,000	

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50

OMB Control No:
Expiration Date:
Review Draft

Provide data for the 200
UK = Unknown, **NA = I**
Include one (or more) ro

Instruction:	Enter the number of vents/stacks on the paper machine dry end following the dryers (e.g., vents around the calendering and winding areas) that vent to the atmosphere. Count vents ducted together prior to release to the atmosphere as one vent.	Enter the total exhaust gas flow rate from dry end vents/stacks not associated with the paper machine dryer(s) in actual cubic feet per minute (if known)	Enter description of any process improvements that might reduce HAP emissions from the paper machine dry end (dryers or other vents/stacks following the dryers).	Optional. Enter any comments you have on the data supplied.
Survey reference:				
Field:	**Number of vents/stacks following the dryer**	**Total exhaust gas flow rate from the dry end vents/stacks, acfm (if known)**	**Describe any process improvements used to reduce HAP emissions from the dry end**	**Comments**
Example entry:	2	40,000		
	2	40,000		
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				
32				
33				
34				
35				
36				
37				
38				
39				
40				
41				
42				
43				
44				
45				
46				
47				
48				
49				
50				

OMB Control No: XXX-XXX
Expiration Date: XX/XX/XXXX

Did any of the responses (individual cells) you entered in this tab contain CBI?
If you did want to shade the CBI-containing cells red and follow the instructions in section E of the Survey Overview document, check this box

Return to Menu

Complete the table for any stock preparation and paper machine additives that contain "measurable" amounts of the following HAP: formaldehyde, acetaldehyde, naphthalene, methylene chloride, acrylamide, or benzene.
For purposes of this survey, "measurable" is defined consistent with OSHA MSDS reporting requirements) as amounts greater than 0.1% for carcinogens, and amounts greater than 1% for non-carcinogens. See the survey instructions for more information.
UK = Unknown. NA = Not Applicable. See instruction document for details on use of these terms.

Instruction:	Provide for all entries. This should match NSI Site ID used in Part II.	List additive type	Separate with commas if multiple HAP are present (e.g., formaldehyde-5%, acetaldehyde-1%). Add any explanations to your survey response if necessary.	Enter numeric value of additive amount used (not the amount of active HAP ingredient used).	Select from list or write in.	Enter description of any substitute additives. Enter "UK" if unknown	Enter description	Optional. Enter any comments you have on the data supplied.	
Survey reference:									
Field:	**NSI Site ID**	**Additive**	**HAP content (% by volume or ppmv for liquids; % by weight or ppmw for solids)**	**Amount of additive used in 2009**	**Units for amount**	**Is the mill aware of any substitute for this additive that do not contain the listed HAP? If so, please describe.**	**Indicate if the additive substitute(s) listed in the previous column contain other compounds that may not be desirable from a worker safety perspective**	**Comments**	
Example entry:	054604	Wet strength resin	Formaldehyde - 5%	6.000	Pounds	UK	UK		
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									
36									
37									
38									
39									
40									
41									
42									
43									
44									
45									
46									
47									
48									
49									
50									
51									
52									
53									
54									
55									
56									
57									
58									
59									
60									
61									
62									
63									
64									
65									
66									
67									
68									
69									
70									
71									
72									
73									
74									
75									
76									
77									
78									
79									
80									
81									
82									
83									
84									
85									
86									
87									
88									
89									
90									
91									
92									
93									
94									
95									
96									
97									
98									
99									
100									
101									
102									
103									
104									
105									
106									
107									
108									
109									
110									
111									
112									
113									
114									
115									
116									
117									
118									
119									
120									
121									
122									
123									
124									
125									
126									
127									
128									
129									
130									
131									
132									
133									
134									
135									
136									
137									
138									
139									
140									
141									
142									
143									
144									
145									
146									
147									
148									
149									
150									
151									
152									
153									
154									
155									
156									
157									
158									
159									
160									
161									
162									
163									
164									
165									
166									
167									
168									
169									
170									
171									
172									
173									
174									
175									
176									
177									
178									
179									
180									
181									
182									
183									
184									
185									
186									
187									
188									
189									
190									
191									
192									
193									
194									
195									
196									
197									
198									
199									
200									

OMB Control No:	xxxx-xxxx
Expiration Date:	xx/xx/xxxx

Did any of the responses (individual cells) you entered in this tab contain CBI?
If yes, be sure to shade the CBI-containing cells red and follow the instructions in section C of the survey overview document for submitting CBI.

Review Draft

WWTP = wastewater treatment plant
Provide a flow diagram of each WWTP showing each wastewater handling/treatment unit.
UK = Unknown, **NA = Not Applicable**. See instruction document for details on use of these terms.
Use this table to specify any Federal/State/local requirements, permit limits, fenceline monitoring, measurement methods, or modeling methods that apply for measurement or estimation of air emissions (HAP, TRS including H2S) associated with the WWTP.

Instruction:	Provide for all entries. This should match NEI Site ID used in Part II.	Select yes or no. If yes, please continue with completion of the WW tab. If no, see the instruction document.	Select from menu or write in.	Select from menu: Yes - Biological treatment occurring at the wastewater treatment entity (POTW or private company) is used to comply with the subpart S standards for kraft condensates. OR No - The mill uses a methods other than biological treatment to comply with the kraft condensate standards. If you answer yes, then EPA requests that you complete the remainder of this WW tab to the extent that information is available for the WWTP.	Specify yes/no.		Select yes or no. If yes, submit the most recent measurement methods and results as a separate file attachment to your survey response.	Select yes or no. If yes, submit the most recent measurement methods (e.g., ambient measurements) and results as a separate file attachment to your survey response.	Select yes or no. If yes, submit documentation of the most recent modeled emission estimates as a separate file attachment to your survey response.	If no fenceline monitoring, measurements (e.g., ambient measurements), or estimates of emissions from the wastewater treatment system have been conducted, please explain how wastewater treatment system emissions are accounted for in your air operating permit. In you explanation, list the specific wastewater treatment system air pollutants for which limits are specified in your air permit. Select not applicable "NA" from menu if you answered yes to one of the previous 3 questions. Select from menu if air emissions associated with wastewater treatment are not addressed in your air permit.	Enter the 2009 average daily throughput of the wastewater treatment plant (million gallons per day)
Survey reference:											
Field:	**NEI Site ID**	**Does the mill perform onsite wastewater treatment beyond operation of a clarifier for suspended solids removal?**	**If mill wastewater treatment is outsourced to a POTW or private entity, indicate pre-treatment steps occuring onsite at the mill.**	**For kraft pulp mills outsourcing wastewater treatment, is biological treatment performed at the WWTP used to demonstrate compliance with the subpart S kraft condensate standards?**	**Does the mill have permit limits (including occupational health limits) related to air pollutants specifically from wastewater sources?**	**If yes, please specify the limits (and applicable units) and explain how compliance is demonstrated with these limits.**	**Has fenceline monitoring for air emissions (including WWTP air emissions) been performed since the mill came into compliance with the cluster rules (NESHAP subpart S and the pulp and paper effluent limitations)?**	**Have air emissions associated with the WWTP been measured?**	**Have air emissions associated with the WWTP been estimated (e.g., with 40 CFR part 63 Appendix C and WATER9 or another model)?**	**Explain how wastewater treatment system emissions are accounted for in your air permit if you answered "no" to the previous 3 questions**	**WWTP throughput, MMgal/day**
Example entry:	99999	yes			yes	We have OSHA limits for H2S and other compounds. See WWTP attachment with our survey response for a tabular summary.	no	no	yes (see separate WWTP attachment with modeling input and output)	NA	18.5
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											
26											
27											
28											
29											
30											
31											
32											
33											
34											
35											
36											
37											
38											
39											
40											
41											
42											
43											
44											
45											
46											
47											
48											
49											
50											
51											
52											
53											
54											
55											
56											
57											
58											
59											
60											
61											
62											
63											
64											
65											
66											
67											
68											
69											
70											
71											
72											
73											
74											
75											
76											
77											
78											
79											
80											
81											
82											
83											
84											
85											
86											
87											
88											
89											
90											
91											
92											
93											
94											
95											
96											
97											
98											
99											
100											

OMB Control No:
Expiration Date:
Review Draft

WWTP = wastewater treatment plant
Provide a flow diagram of each WWTP
UK = Unknown. NA = Not Applicat
Use this table to specify any Federal/S

Instruction:	If known, enter the approximate volume percentage of water entering the WWTP from each general mill location. Use decimal percentages (e.g., enter 0.75 for 75%). See the instruction document for joint WWTP's shared by multiple mills.								Select the general type of WWTP used by your mill. Select from menu or write in a description.	Select from list or write in description. Include systems installed for the purpose of reducing emissions from the WWTP, or systems that were not installed for this purpose but coincidentally lead to substantially reduced emissions from the WWTP.	Enter short description Include practices/measures implemented for the purpose of reducing emissions from the WWTP, or practices/measures that were not implemented for this purpose but coincidentally lead to substantially reduced emissions from the WWTP.	Select from list or write in description Include practices/measures implemented for the purpose of reducing emissions from the WWTP, or practices/measures that were not implemented for this purpose but coincidentally lead to substantially reduced emissions from the WWTP.	List the wastewater treatment units in your WWTP (separated by commas) in the general sequence in which wastewater flows through the units. Include any primary and/or secondary clarifiers, oil-water separators, equalization basins, neutralization, activated-sludge biological treatment units, aerated or non-aerated surface impoundments, anaerobic digesters, other biological treatment units (trickling filters, rotating biological contactors), wastewater storage tanks, and any other wastewater treatment units. Do not include steam or air strippers, or effluent cooling towers. Provide a flow diagram showing each wastewater handling/treatment unit.
Survey reference:													
Field:	**Approximate volume percentage of WWTP capacity from kraft condensate streams hard piped for biological treatment in the WWTP (per subpart S) (if known)**	**Approximate volume percentage of WWTP capacity from chemical pulping and chemical recovery processes (other than subpart S hard-piped kraft condensates) (if known)**	**Approximate volume percentage of WWTP capacity from non-chemical pulping processes (e.g., mechanical, secondary fiber, or non-wood pulping) (if known)**	**Approximate volume percentage of WWTP capacity from the power and steam generation area(s) (e.g., boiler blowdown, wet ash handling systems) (if known)**	**Approximate volume percentage of WWTP capacity from bleaching processes (if known)**	**Approximate volume percentage of WWTP capacity from papermaking processes (if known)**	**Approximate volume percentage of WWTP capacity from other processes (if known)**	**Check (=1)**	**General type of wastewater treatment system**	**Identify upstream process wastewater treatment systems that reduce wastewater treatment unit air emissions of nonchlorinated organic HAP and TRS (including H2S).**	**Describe any upstream practices or pollution prevention measures that reduce wastewater treatment unit air emissions of nonchlorinated organic HAP and TRS (including H2S).**	**Describe any upstream practices or pollution prevention measures that reduce wastewater treatment unit air emissions of chlorinated HAP.**	**List the wastewater treatment units in your WWTP in the general sequence in which they are used**
Example entry:	0.05	0.25	NA	0.05	0.2	0.35	0.1	1	Aerated stabilization basin (aerated surface impoundment)	steam stripper (STRIPPER)		Use ClO2 bleaching (instead of chlorine or hypochlorite)	Clarifiers 1-3 (in parallel), aeration basins 1 and 2, activated sludge basin, and secondary clarifiers 4-6 (in parallel)
1								0					
2								0					
3								0					
4								0					
5								0					
6								0					
7								0					
8								0					
9								0					
10								0					
11								0					
12								0					
13								0					
14								0					
15								0					
16								0					
17								0					
18								0					
19								0					
20								0					
21								0					
22								0					
23								0					
24								0					
25								0					
26								0					
27								0					
28								0					
29								0					
30								0					
31								0					
32								0					
33								0					
34								0					
35								0					
36								0					
37								0					
38								0					
39								0					
40								0					
41								0					
42								0					
43								0					
44								0					
45								0					
46								0					
47								0					
48								0					
49								0					
50								0					
51								0					
52								0					
53								0					
54								0					
55								0					
56								0					
57								0					
58								0					
59								0					
60								0					
61								0					
62								0					
63								0					
64								0					
65								0					
66								0					
67								0					
68								0					
69								0					
70								0					
71								0					
72								0					
73								0					
74								0					
75								0					
76								0					
77								0					
78								0					
79								0					
80								0					
81								0					
82								0					
83								0					
84								0					
85								0					
86								0					
87								0					
88								0					
89								0					
90								0					
91								0					
92								0					
93								0					
94								0					
95								0					
96								0					
97								0					
98								0					
99								0					
100								0					

OMB Control No:
Expiration Date:
Review Draft

WWTP = wastewater treatment plant
Provide a flow diagram of each WWTP
UK = Unknown. NA = Not Applicat
Use this table to specify any Federal/S

Biological treatment system performance data (required for biological treatment systems controlling kraft pulping condensates):

Instruction:	If any wastewater treatment units are equipped with a closed vent collection system and air pollution control device (APCD), then you should also include the wastewater treatment unit in the Emission Unit ID column of the *PI Equip detail* and *PI Control* tabs and indicate the APCD information in those tabs.	This question applies for non-thoroughly mixed biological treatment units. Specify the number of zones used to characterize the biological treatment system (e.g., under 40 CFR part 63, Appendix C). Enter "NA" if not applicable.	First quarter (Q1) compliance determination for 2009		See equation in §63.457(l) of subpart S for calculation of "r"	The value of F_{ms}(MeOH) is used in the equations in §63.457(l) of subpart S for purposes of determining percent reduction or mass removal of total HAP in a biological treatment system	Enter the percent reduction of total HAP if percent reduction is used to demonstrate compliance with subpart S. For example, enter "92" for a 92 percent reduction. Leave blank if the percent reduction compliance option is not used. "Total HAP" includes acetaldehyde, methanol, MEK, and propionaldehyde.	Enter the mass removal of total HAP if mass removal is used to demonstrate compliance with subpart S. Leave blank if the mass removal compliance option is not used.	Second quarter (Q2) compliance				Third quarter (Q3) compliance		
Survey reference:															
Field:	**Identify any wastewater treatment units from the list in the previous column that are closed systems. Indicate controls if the unit is equipped with a closed vent collection system and APCD.**	**Number of zones used to characterize the biological treatment system**	**Q1 mass flow rate of methanol entering the system (kg/Mg ODP)**	**Q1 mass flow rate of acetaldehyde, MEK, and propionaldehyde entering the system (kg/Mg ODP)**	**Mass flow ratio of non-methanol total HAP to methanol (value of "r")**	**Q1 value of F_{ms}(MeOH) determined according to 40 CFR 63 Appendix C**	**Q1 percent reduction in "total HAP" (%)**	**Q1 mass removal of "total HAP" (kg/Mg ODP)**	**Q2 mass flow rate of methanol entering the system (kg/Mg ODP)**	**Q2 value of F_{ms}(MeOH) determined according to 40 CFR 63 Appendix C**	**Q2 percent reduction in total HAP (calculated using the quarterly methanol measurement and value of "r" as specified in subpart S), %**	**Q2 mass removal of "total HAP" calculated as specified in subpart S (kg/Mg ODP)**	**Q3 mass flow rate of methanol entering the system (kg/Mg ODP)**	**Q3 value of F_{ms}(MeOH) determined according to 40 CFR 63 Appendix C**	**Q3 percent reduction in total HAP (calculated using the quarterly methanol measurement and value of "r" as specified in subpart S), %**
Example entry:	NA	4	11.5	0.35	0.03	0.97	94		5.9	0.92		5.3	9.8	0.98	95
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															
25															
26															
27															
28															
29															
30															
31															
32															
33															
34															
35															
36															
37															
38															
39															
40															
41															
42															
43															
44															
45															
46															
47															
48															
49															
50															
51															
52															
53															
54															
55															
56															
57															
58															
59															
60															
61															
62															
63															
64															
65															
66															
67															
68															
69															
70															
71															
72															
73															
74															
75															
76															
77															
78															
79															
80															
81															
82															
83															
84															
85															
86															
87															
88															
89															
90															
91															
92															
93															
94															
95															
96															
97															
98															
99															
100															

OMB Control No:
Expiration Date:
Review Draft

WWTP = wastewater treatment plant
Provide a flow diagram of each WWTP
UK = Unknown, **NA = Not Applica**
Use this table to specify any Federal/S

Instruction:	Fourth quarter (Q4) compliance				Optional. Enter any comments you have on the data supplied.
Survey reference:					
Field:	**Q3 mass removal of "total HAP" calculated as specified in subpart S (kg/Mg ODP)**	**Q4 mass flow rate of methanol entering the system (kg/Mg ODP)**	**Q4 value of F_{ss}(MeOH) determined according to 40 CFR 63 Appendix C**	**Q4 percent reduction in total HAP (calculated using the quarterly methanol measurement and value of "r" as specified in subpart S), %**	**Q4 mass removal of "total HAP" calculated as specified in subpart S (kg/Mg ODP)**	**Comments**
Example entry:		12.3	0.95	92		
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57						
58						
59						
60						
61						
62						
63						
64						
65						
66						
67						
68						
69						
70						
71						
72						
73						
74						
75						
76						
77						
78						
79						
80						
81						
82						
83						
84						
85						
86						
87						
88						
89						
90						
91						
92						
93						
94						
95						
96						
97						
98						
99						
100						

OMB Control No:	xxxx-xxxx
Expiration Date:	xx/xx/xxxx

Review Draft

Did any of the responses (individual cells) you entered in this tab contain CBI?
If yes, be sure to shade the CBI-containing cells red and follow the instructions in section C of the survey overview document for submitting CBI.

If you are required to submit a Part III response, are you deferring until Part III submittal of any of the test data required in Attachment 1 to the Part I survey instructions?

Use this table to identify the specific emission units for which emission test reports are being submitted. EPA will extract the test data from the emission test reports.
UK = Unknown. **NA = Not Applicable**. See instruction document for details on use of these terms.
See Attachment 3 of the Part I survey instruction document for a list of emissions test reports to be submitted.

			Leave columns that do not apply for a given emission unit blank.				
Instruction:	Provide for all entries. This should match NEI Site ID used in Part II.	Provide for all entries. Emission Unit IDs should match those used in other tabs such as the *PI Equip detail* tab.	Specify the collection system if applicable. (Examples of collection systems include closed vent systems, LVHC, and HVLC systems.) Collection system IDs should match those used in other tabs such as the *PI Equip detail* tab.	Provide the APCD used during the emissions test. APCD_IDs should match those used in other tabs such as the *PI Equip detail* tab (unless equipment configuration has changed).	Enter combustion controls used during the emission test (e.g., combustion modifications/controls specified in the *PI Equip detail* tab)	Use this column for notes or if helpful to specify the emission points tested (e.g., for equipment with multiple emission points, where only selected emission points/vents were tested)	Enter year testing was conducted (i.e., the test date year)
Survey reference:							
Field:	**NEI Site ID**	**Emission Unit ID(s)**	**Collection system ID(s)**	**APCD_ID(s)**	**Combustion modifications or controls used to reduce air pollution (from combustion sources)**	**Process testing notes (optional)**	**Test report year (XXXX)**
Example entry:	99999	DIG-1, DIG-2, EVAP	LVHC-1	LK1/SCBR2			2006
	99999	LK1		SCBR2			2006
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
41							
42							
43							
44							
45							
46							
47							
48							
49							
50							

Field:	NEI Site ID	Emission Unit ID(s)	Collection system ID(s)	APCD_ID(s)	Combustion modifications or controls used to reduce air pollution (from combustion sources)	Process testing notes (optional)	Test report year (XXXX)
51							
52							
53							
54							
55							
56							
57							
58							
59							
60							
61							
62							
63							
64							
65							
66							
67							
68							
69							
70							
71							
72							
73							
74							
75							
76							
77							
78							
79							
80							
81							
82							
83							
84							
85							
86							
87							
88							
89							
90							
91							
92							
93							
94							
95							
96							
97							
98							
99							
100							

OMB Control No:
Expiration Date:
Review Draft

Use this table to identify the specific
UK = Unknown. **NA = Not Applica**
See Attachment 3 of the Part I surve

Instruction:	List the pollutants tested. Separate multiple pollutants by commas.	Enter the EPA test method number (e.g., M5, M7E). Be very specific if the method used was not an EPA method.	Specify if APCD inlet or outlet data are provided (or both)	This question will be used in determining whether the test data remain representative of your current operations.	Explain any changes in equipment configuration as they relate to representativeness of the emissions test data supplied.	OPTIONAL: Data regarding frequency and cost of testing would help EPA more accurately estimate testing costs associated with the pulp and paper NESHAP and NSPS.	OPTIONAL	Optional. Enter any comments you have on the data supplied.
Survey reference:								
Field:	**Pollutants tested**	**Test method(s) used**	**Are inlet or outlet data provided?**	**Has the configuration of the emission unit, combustion controls, collection system, or APCD changed since the test was conducted?**	**If yes, please explain**	**How often are you required to perform testing of this emission unit for the pollutants listed?**	**Approximate cost per test, $**	**Comments**
Example entry:	methanol	M308	inlet and outlet	no		one-time test only	12000	
	PM	M5	outlet	no		annually	6000	
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								
33								
34								
35								
36								
37								
38								
39								
40								
41								
42								
43								
44								
45								
46								
47								
48								
49								
50								

Drop Down List	Field	NOTE
Frequently Used Drop Downs		
	CBI Box	All tabs but Permi
Yes	**All tabs but Permit Limits**	
No		
	Small business	Mill
yes		
no		
UK		
	P&P NESHAP subpart S	Mill
	Combustion Source NESHAP subpart MM	Mill
Applies	Paper/web coating NESHAP subpart JJJJ	Mill
NA	Other NESHAP (list subparts)	
NA-Synthetic Area Source		
Applies	Kraft NSPS subpart BB	Mill
NA		
	Has the mill taken steps within the last 10 years to control makeup water quality for the causticizing emission unit such that air emissions from any equipment would be reduced?	equip
	Is the stripper integrated with the multiple effect evaporator system?	equip
	Is emission unit subject to NESHAP subpart S?	equip
	Is emission unit subject to NSPS BB?	Mill
	Does the mill purchase secondary fiber pulp?	Mill
	Is natural gas supply currently available to the mill (e.g., truck delivery or pipeline)?	Mill
	Does the mill purchase virgin pulp?	Mill
	Does the mill produce virgin pulp?	controls
	Heat recovery	controls
	Is WESP preceded by a quench chamber	controls
	Have fields/chambers been added to expand the ESP within the last 10 years?	controls
	Is water recirculated?	pulp
	Sawmill residues	pulp
	Chips produced offsite	pulp
	Chips produced onsite	pulp
	For TMP or pressurized groundwood systems, is a heat recovery system used?	bleaching
	Is the bleaching line preceded by O2 delignification?	bleaching
	Are chlorine or chlorinated compounds used in any stage of the bleaching line?	bleaching
	Does stage 6 use chlorine or chlorinated compounds?	bleaching
	Does stage 5 use chlorine or chlorinated compounds?	bleaching
	Does stage 4 use chlorine or chlorinated compounds?	bleaching
	Does stage 3 use chlorine or chlorinated compounds?	bleaching
	Does stage 2 use chlorine or chlorinated compounds?	bleaching
	Does stage 1 use chlorine or chlorinated compounds?	WW
	Have air emissions associated with the WWTP been estimated (e.g., with 40 CFR part 63 Appendix C and WATER9 or another model)?	WW
	Have air emissions associated with the WWTP been measured?	WW
	Has fenceline monitoring for air emissions (including WWTP air emissions) been performed since the mill came into compliance with the cluster rules (NESHAP subpart S and the pulp and paper effluent limitations)?	WW
	Does the mill have permit limits (including occupational health limits) related to air pollutants specifically from wastewater sources?	Emission
Yes	Has the configuration of the emission unit, combustion controls, collection system, or APCD changed since the test was conducted?	Emission
No	If you are required to submit a Part III response, are you deferring until Part III	
Mill Tab		
	HAP size classification	

major
area (true)
synthetic minor
UK

Primary NAICS
322110-Pulp Mills
322121-Paper (except Newsprint) Mills
322122-Newsprint Mills
322130-Paperboard Mills
322211-Corrugated and Solid Fiber Box Manufacturing
322212-Folding Paperboard Box Manufacturing
322213-Setup Paperboard Box Manufacturing
322214-Fiber Can, Tube, Drum, and Similar Products Manufacturing
322215-Non-Folding Sanitary Food Container Manufacturing
322221-Coated and Laminated Packaging Paper Manufacturing
322222-Coated and Laminated Paper Manufacturing
322223-Coated Paper Bag and Pouch Manufacturing
322224-Uncoated Paper and Multiwall Bag Manufacturing
322225-Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses
322226-Surface-Coated Paperboard Manufacturing
322231-Die-Cut Paper and Paperboard Office Supplies Manufacturing
322232-Envelope Manufacturing
322233-Stationery, Tablet, and Related Product Manufacturing
322291-Sanitary Paper Product Manufacturing
322299-All Other Converted Paper Product Manufacturing

Worldwide employees Facility employees
<50
50-99
100-499
500-749
750-999
>1000

Boiler NESHAP subpart DDDDD (or CISWI emission guidelines/NSPS) that are under development
Expect DDDDD to apply
Expect CISWI to apply
Expect DDDDD and/or CISWI to apply (to be determined based on final applicability of these rules)
NA

Boiler NSPS
D
Da
Db
Dc

Other NSPS (list subparts)
K
Ka
Kb
GG
Other (enter 40 CFR part 60 subpart)
NA

Does the mill produce pulp from secondary fiber?
yes
yes - use pre-consumer fiber
yes - use post-consumer fiber
yes - use pre- and post-consumer fiber
no

Types of market pulp produced by the mill
Dissolving pulp
Softwood chemical market pulp
Hardwood chemical market pulp

Mechanical market pulp
Market pulp from secondary (recycled) fiber
NA (market pulp not produced)

	Is bleaching or brightening performed at the mill?
yes-bleaching	
yes-brightening	
yes-bleaching and brightening	
yes-other {specify}	
no	

	Paper grade 1
newsprint	Paper grade 2
coated free sheet	Paper grade 3
uncoated free sheet	Paper grade 4
coated groundwood	Paper grade 5
uncoated groundwood	Paper grade 6
tissue & sanitary	Paper grade 7
specialty packaging & industrial	Paper grade 8
kraft packaging	Paper grade 9
linerboard	Paper grade 10
corrugating medium	
solid bleached board	
recycled board	
construction paper and board	
other (specify type)	

PI Equip detail Tab	
	Configuration if not emitted through a conveyance
NV	
BLDG	
FUGITIVE	

	Year emission unit installed
UK	
pre-1990	

	Location of flow rate provided
inlet to collection system	
collection system outlet prior to control device,	
inlet to control device,	
control device outlet	
prior to atmospheric release	

	Combustion controls
low NOx burners	
quarternary air	
other {specify}	

	APCD1 type
Recovery furnace ESP (dry bottom)	APCD2 type
Recovery furnace ESP (wet bottom)	APCD3 type
ESP (dry)	APCD4 type
Wet ESP (WESP)	
Scrubber - venturi	
Scrubber - quench	
Scrubber - packed bed	
Scrubber	
Absorber	
Mist eliminator	
Thermal oxidizer/incinerator	
Regenerative thermal oxidizer	
Multicyclone	
Cyclone (excluding product recovery cyclones)	
Fabric filter (baghouse)	
Condenser	
Gravel bed	

Dry sorbent injection
Carbon absorber
Selective noncatalytic reduction
Selective catalytic reduction
Boiler (specify Emission Unit ID)
Lime kiln (specify Emission Unit ID)
Recovery furnace (specify Emission Unit ID)
Other - specify type (and Emission Unit ID if applicable)
Uncontrolled

Reason subject to BB
new
modified
reconstructed
modified or reconstructed (not sure)
collects emissions from BB emission units

Specify TRS compliance option used to demonstrate NSPS subpart BB compliance (if applicable)
5 ppmdv @ 10% O2 (combustion control)
Specify TRS compliance option used for backup method of control (if applicable)
5 ppmdv, uncorrected for O2 (control other than combustion)
combust gases in lime kiln or recovery furnace subject to subpart BB
combust gases at 1200oF for at least 0.5 sec
incinerating brown stock washer gases is not feasible
uncontrolled digester gases contain <0.01 lb TRS/ton ADP
8 ppmdv @ 10% O2 (lime kilns)
0.033 lb/ton BLS as H2S (SDTs)
5 ppmdv @ 8% O2 (straight recovery furnace)
25 ppmdv @ 8% O2 (cross recovery furnace)
Meet permit limit more stringent than NSPS

Subpart S compliance option used (for primary method of control)
Reduce total HAP emissions by 98 wt%
Subpart S compliance option used (for backup method of control, if applicable)
Reduce total HAP concentration at the outlet of thermal oxidizer to <20 ppmv @ 10% O2 (dry basis)
Reduce total HAP emissions using a thermal oxidizer operating >1600F and >.75 secs residence time
Use a boiler, LK, or RF in which the HAP gas stream in introduced with the primary fuel into the flame zone
Use a boiler or RF with a heat input capacity >150 MMBtu/hr (44 MW) in which the HAP gas stream is introduced with the combustion air
Clean condensate alternative (§63.447).
0.89 lb/ton ODP (for Ca- or Na-based sulfite pulping)
92% reduction by weight (for Ca- or Na-based sulfite pulping)
2.2 lb/ton ODP (for Mg-based or NH3-based sulfite pulping)
87% reduction by weight (for Mg-based or NH3-based sulfite pulping)

Provide reason if not controlled to meet subpart S
Systems of this type at existing sources are not subject to subpart S
Mill is a synthetic area source
The system does not match the definitions for controlled systems in subpart S. Provide reason (e.g., due to specific location of the system in the process line).
Exception 63.443(a)(ii)(A): knotter system with HAP emissions <0.1 lb/ton ODP
Exception 63.443(a)(ii)(B): screen system with <0.2 lb/ton ODP,
Exception 63.443(a)(ii)(C): knotter and screen system with combined emissions <0.3 lb/ton ODP
Exception 63.443(a)(iv)(A): decker uses only fresh water or paper machine white water
Exception 63.443(a)(iv)(B): decker uses process water with < 400 ppmw
Mill received equivalency by permit approval
Mill undertook innovations project
Emissions from this unit were offset using CCA
Other - specify

Batch or continuous
Batch
Continuous

Wood type (HW, SW, HW/SW swing)
HW
SW
HW/SW swing
HW and SW
Non-wood

Washer types and sequence
vacuum drum
diffusion
pressure
belt

Type of shower water used in decker
contaminated condensates
clean condensates
white water
other (specify)
NA

Type of stripper
steam
air

Primary reason for installation of the stripper
TRS control
BOD reduction
water conservation
subpart S kraft pulping condensate standards
nonchlorinated organic HAP control

Tank contents
weak black liquor
strong black liquor
high density pulp
white liquor
green liquor

Tank control technique
Open tank
FR =fixed roof
EFR = external floating roof
IFR = internal floating roof
Collection system and control device
Emissions routed to process (enter Emission Unit ID)

If floating roof is used, type of seal
NA
Mechanical shoe primary seal (MS1)
MS1 with shoe mounted secondary (MESA)
MS1 with rim mounted secondary (MESA)
liquid mounted primary seal (LM1)
LM1 with rim mounted secondary (LM2)
vapor mounted primary seal (VM1)
M1 with rim mounted secondary (VM2)

Pond contents
weak black liquor
strong black liquor
white liquor
green liquor

Source(s) of makeup water added to mud washer or precoat filter
Untreated process condensates from {specify process - e.g., evaporator, blow heat recovery}
surface water
fresh water
process water {specify source}
treated wastewater
partially treated wastewater {specify last wastewater treatment unit water passed through}
mixture {specify sources}

Primary fuel type Supplemental fuel type 1
natural gas
#2 distillate oil
#6 residual oil
bark
hog fuel
turpentine
tall oil
petroleum coke
tire-derived fuel
wastewater treatment plant residuals
OCC rejects

Optional: Primary fuel HHV units Optional: Supplemental fuel type 1 HHV units
Btu/gal
MMBtu/ton
Btu/MMscf

Conditions when supplemental fuel type 1 used
routine use (multi-fuel fired unit)
startup
backup
shutdown
pilot light
during upset conditions
seasonally during curtailments or peak prices
when turpentine prices are low
when tall oil prices are low

Measures employed to reduce air emissions during emission unit startup (if any)
emission unit and control device operates in compliance with NSPS and NESHAP parameter limits during emission unit startup
emission unit and control device operates during emission unit startup (but not necessarily in compliance with all NSPS/NESHAP parameter limits)
backup/alternate control
NA - applicable emission and parameter limits not expected to be exceeded during startup

Measures employed to reduce air emissions during shutdown (if any)
continue routing emissions to LVHC-1 collection system and primary or backup control system
continue routing emissions to LVHC-1 collection system and primary or backup control system
stop routing process condensates to stripper before beginning shutdown
NA - applicable emission and parameter limits not expected to be exceeded during shutdown
emission unit and control device operates during emission unit startup (but not necessarily in compliance with all NSPS/NESHAP parameter limits)
continue routing emissions to LVHC-1 collection system and primary or backup control system
Temperature drops below 200F

PI Permit limits

Pollutant
TRS

SO2
sulfuric acid mist
NOx
CO
Pb or other HAP metals
VOC
THC
HCl
Methanol and gaseous organic HAP
Chlorine and chlorinated HAP
Opacity
PM
PM - filterable
PM - condensable
PM10
PM10 - filterable
PM10 - condensable
PM2.5
PM2.5 - filterable
PM2.5 - condensable

	If the permit limit is identical to the Federal NESHAP or NSPS limit, you may enter the NESHAP/NSPS subpart here rather than restating the Federal limit in the columns to the right
Subpart S (P&P NESHAP)	
Subpart MM (P&P combustion source NESHAP)	
Subpart BB (Kraft NSPS)	
Subpart BB (Kraft NSPS) - 1978	
Subpart BB (Kraft NSPS) - 1986 revision	

	Units for permit limit 1 (including any applicable %O2 or %CO2 correction factors)
gr/dscf @ 8% O2	
gr/dscf @ 10% O2	
lb/ton BLS	
ppmdv @ 8% O2	
ppmdv @ 10% O2	
lb/ton BLS (as H2S)	
lb/MMBtu	
ppmdv	
% reduction	
% opacity	

	Averaging time for permit limit 1 (if applicable)
3-hour	Averaging time for permit limit 2 (if applicable)
12-hour	Averaging time for permit limit 3 (if applicable)
daily	Averaging time for permit limit 4 (if applicable)
test	Averaging time for permit limit 5 (if applicable)

PI Controls

	Type of control device
Recovery furnace ESP (dry bottom)	
Recovery furnace ESP (wet bottom)	
ESP (dry)	
Wet ESP (WESP)	
Scrubber - venturi	
Scrubber - quench	
Scrubber - packed bed	
Scrubber	
Absorber	
Mist eliminator	
Thermal oxidizer/incinerator	
Regenerative thermal oxidizer	
Multicyclone	
Cyclone (excluding product recovery cyclones)	
Fabric filter (baghouse)	
Condenser	
Gravel bed	

Dry sorbent injection
Carbon absorber
Selective noncatalytic reduction
Selective catalytic reduction
Other - *specify type*

Incinerator type
Single-stage combustion chamber
Two-stage combustion chamber
Regenerative thermal oxidizer (RTO)

What is the recovered heat from the incinerator exhaust used for?
preheat incoming emission stream
produce steam
produce hot water

Sorbent type
activated carbon
lime
other (specify)

List pollutants the sorbent injection was installed to control
acid gases (HCl, SO2, HF)
SO2
Hg
dioxins

Bag cleaning method
Shake
Reverse air
Pulse jet

Water source
surface water
fresh water
process water {specify source}
treated wastewater
partially treated wastewater {specify last wastewater treatment unit water passed through}
mixture {specify sources}

Wastewater (blowdown) reuse or disposal method
Treated in onsite wastewater treatment plant
Recycled to mud washer(s)
Recycled to SDT
Recycled to process: {specify equipment receiving water using Emission Unit ID OR APCD_ID}
POTW
Other {specify}

Type of material collected
PM
PM and sorbent
Sorbent

End use/method of disposal for solid material collected
landfill onsite
lanffill offsite
recycle to causticizing system
sent to salt cake mix tank
reuse {specify}

	List continuous parameter monitoring systems used for this control device (e.g., pressure drop, liquid flow)
pressure drop	
liquid flow rate	
voltage	
current	
temperature (specify if inlet, outlet, bed, or other temperature)	
pH	
percent solids in recycle water	
other (specify)	

	Explain how control device startup is integrated with (dependent upon) emission unit startup/operation
Control device is started up and meets required operating parameter limits before emission unit is started up.	
Control device cannot be started prior to emission unit starting up due to safety issue or risk of property damage. {Explain}	
Control device cannot function as designed unless an air flow rate of {*specify*} acfm from the emission unit is achieved.	

	List any control device continuous emissions monitoring or operating parameter limits that cannot be met during control device startup
The applicable emission and parameter limits are expected to be met during startup	

	Explain how control device shutdown is integrated with (dependent upon) emission unit shutdown
Control device continues to operate and meets required operating limits while emission unit is shut down.	
Control device cannot operate during emission unit shut down due to safety issue or risk of property damage. {Explain}	
Control device cannot function as designed unless an air flow rate of {*specify*} acfm from the emission unit is achieved.	

Pulp prod

	Pulping processes
kraft	
soda	
semi-chemical	
sulfite-NH3	
sulfite-Ca	
Chemi-themo-mechanical pulp (CTMP)	
stone groundwood (SGW)	
pressurized groundwood (PGW)	
thermo-mechanical pulping (TMP)	
refiner mechanical pulping (RMP)	
secondary fiber	
non-wood	

	Non-wood material
cotton	
bagasse	
kenaf	
other {specify}	

Byproducts

	Is tall oil acidulation reactor batch or continuous?
batch	
continuous	

Kraft condensates

	Kraft condensate stream
Digester systems	
Turpentine recovery systems	
Evaporator systems	
HVLC collection systems	
LVHC collection systems	
Combined systems	
Other systems {describe}	

	Is condensate stream collected and treated according to subpart S?
Yes	
No	
Partially	

	Indicate volume reduction option being used, or other reason why condensate stream is not collected and controlled
NA-system does not exist at mill	
1	
2A	
2B	

	For condensates treated by steam stripping, specify the control option used
	For condensates treated by biological treatment, specify the control option used
92% total HAP reduction (by weight)	
	Specify condensate treatment method (if other than steam stripping or biological treatment)
Remove 6.6 pounds/ton ODP	
210 ppmw at the outlet of the control device	
Remove 10.2 pounds/ton ODP	
330 ppmw at the outlet of the control device	
Remove prorated mass of ___ pounds/ton ODP {specify limit}	

	Please describe if multiple treatment methods used for this condensate
In series:	
As backup:	
Other:	

CCA

	CCA debit or credit generating emission point?
debit (uncontrolled)	
debit (under controlled)	
credit	

	Clean condensate alterative technology applied
NA-debit source	
stand-alone biological treatment unit	
steam stripper	
other - specify	

Bleaching

	Is the process ECF, PCF or TCF?
ECF - elemental chlorine free	
PCF - processed chlorine free	
TCF - totally chlorine free	

	Material type
HW only	
SW only	

mixture of HW and SW
secondary fiber
non-wood fiber

	Stage 1 control method
	Stage 2 control method
	Stage 3 control method
NA	Stage 4 control method
scrubber {enter APCD_ID}	Stage 5 control method
other {describe}	Stage 6 control method

	Stage 1 chloroform control option(s) used to demonstrate subpart S compliance
NA (no chlorine or chlorinated compounds used in this stage)	Stage 2 chloroform control option(s) used to demonstrate subpart S compliance
NA (mechanical, non-wood, or secondary fiber mill)	Stage 3 chloroform control option(s) used to demonstrate subpart S compliance
NA (synthetic area source)	
Use no chlorine or hypochlorite AND meet effluent guidelines/standards	Stage 4 chloroform control option(s) used to demonstrate subpart S compliance
Use no chlorine or hypochlorite	Stage 5 chloroform control option(s) used to demonstrate subpart S compliance
Meet effluent guidelines/standards	Stage 6 chloroform control option(s) used to demonstrate subpart S compliance

NA (no chlorine or chlorinated compounds used in this stage)	Stage 1 chlorinated HAP control option used to demonstrate subpart S compliance
NA (synthetic area source)	
99% reduction (by weight) measured as total chlorinated HAP	Stage 2 chlorinated HAP control option used to demonstrate subpart S compliance
99% reduction (by weight) measured as methanol	Stage 3 chlorinated HAP control option used to demonstrate subpart S compliance
Outlet concentration < 10 ppmv measured as total chlorinated HAP	Stage 4 chlorinated HAP control option used to demonstrate subpart S compliance
Outlet concentration < 10 ppmv measured as methanol	Stage 5 chlorinated HAP control option used to demonstrate subpart S compliance
Total outlet mass emission levels for all subject stages < 0.002 lb/ton ODP	Stage 6 chlorinated HAP control option used to demonstrate subpart S compliance

	For mills that use chlorine dioxide (ClO2) bleaching, describe any process or control measures used to reduce emissions of carbon monoxide (CO) from bleaching processes.
NA - ClO2 bleaching is not performed	
None (no CO control measure)	

Paper prod

	Type of paper machine as currently configured
Fourdrinier	
cylinder	
twin-wire	
other {specify}	

	Is furnish mixture bleached or unbleached?
bleached	
unbleached	
mixture of bleached and unbleached (please specify)	

	Paper grade produced
coated free sheet	
uncoated free sheet	
coated groundwood	
uncoated groundwood	
tissue & sanitary	

specialty packaging & industrial
kraft packaging
linerboard
corrugating medium
solid bleached board
recycled board
construction paper and board
other (specify type)

	For unbleached pulps, has the mill taken steps (e.g., installed a screw press) to raise the consistency of the pulp in high density storage in order to reduce emissions associated with the fluid in the unbleached pulp?
no	
yes {please explain}	

	Indicate firing method and fuel type if air drying is used
steam-heated (indirect-fired)	
direct fired (natural gas)	
direct-fired {specify fuel}	

HAP additives

	Units for amount
gal/day	
lb/day	
lb/ton paper	
gal/year	
lb/year	

WW

	Does the mill perform onsite wastewater treatment beyond operation of a clarifier for suspended solids removal?
Yes	
No - Mill wastewater treatment is outsourced to a POTW	
No - Mill wastewater treatment is outsourced to a separate wastewater treatment plant owned/operated by {enter company name}.	
No - Other {please explain}	

	If mill wastewater treatment is outsourced to a POTW or private entity, indicate pre-treatment steps occuring onsite at the mill.
Primary clarification	
Secondary clarification	
Primary and secondary clarification	
Other: {specify}	

	For kraft pulp mills outsourcing wastewater treatment, is biological treatment performed at the WWTP used to demonstrate compliance with the subpart S kraft condensate standards?
Yes – Biological treatment occurring at the wastewater treatment entity (POTW or private company) is used to comply with the subpart S standards for kraft condensates.	
No – The mill uses a methods other than biological treatment to comply with the kraft condensate standards.	

	Explain how wastewater treatment system emissions are accounted for in your air permit if you answered "no" to the previous 3 questions
Air emissions associated with wastewater treatment are not addressed in the air operating permit.	
NA	

	General type of wastewater treatment system
Aerated stabilization basin (aerated surface impoundment)	
Activated-sludge biological treatment	
Anaerobic treatment	
Packaged system (specify e.g., UNOX system)	
Other (specify)	

	Identify upstream process wastewater treatment systems that reduce wastewater treatment unit air emissions of nonchlorinated organic HAP and TRS (including H2S).
steam stripper (enter Emission Unit ID)	
biological treatment unit	
wastewater thermal oxidizer (enter Emission Unit ID)	
Other (specify)	

	Describe any upstream practices or pollution prevention measures that reduce wastewater treatment unit air emissions of chlorinated HAP.
Use only nonchlorinated bleaching compounds	
Use ClO2 bleaching (instead of chlorine or hypochlorite)	
Other (specify)	

PI Emissions test data

	Pollutants tested
PM	
PM2.5-filterable	
PM2.5-cond.	
NOx	
SO2	
CO	
methanol	
THC	
chlorine	
CDD/CDF	
POM/PAH	
Speciated HAP metals	
HCl	
TRS	

	Are inlet or outlet data provided?
outlet	
inlet	
inlet and outlet	

	How often are you required to perform testing of this emission unit for the pollutants listed?
annually	
every 2 years	
every 5 years	
one-time test only	
as requested by the permitting authority	