AREVA

April 10, 2007
JBP:07:010

Benton Clean Air Authority
Attn: Ms. Robin Priddy
114 Columbia Point Drive, Suite C
Richland, WA 99352

Dear Ms. Priddy:

Subject: CY 2006 AREVA NP Inc. Plant Emissions Report

This letter transmits to the Benton Clean Air Authority (BCAA) the annual Washington Department of Ecology (WDOE) Air Emissions Inventory Information and BCAA Synthetic Minor Air Source (Order 95-05) summary for the CY 2006 plant emissions from AREVA NP Inc.'s nuclear fuel fabrication plant at 2101 Horn Rapids Road.

With respect to Order 95-05, NOx source measurements for the UO2 Building dissolvers (K-32 stack) were obtained in October and November 2006, while the ELO Building dissolver (K-56 stack) measurements were obtained in February 2007. All NOx source measurements were obtained with a chemiluminescent analyzer instrument using EPA Method 7E, "Determination of Nitrogen Oxides Emissions from Stationary Sources (Instrumental Analyzer Procedure)". The measurement system is the Thermo Environmental Instruments Inc. Model 42H Chemiluminescence NO-NO2-NOx Analyzer (EPA Approval RFNA-1289-074) and Measurements Technologies Model 3040 Dilution Sampling System, although the dilution system was not used for the measurements.

Responses to the requirements of Order 95-05 Section 3 are as follows:

Section 3.a through 3.d – Attachment 1 shows the 12-month rolling sum of uranium dioxide (UO2) throughput for the dissolvers in the ELO and UO2 buildings during CY2005-2006. The data verify that the throughput did not exceed the 90,000 and 400,000 Kg UO2 limits for the ELO and UO2 dissolvers, respectively.

Sections 3.e and 3.f – Stack K-56 source measurements were obtained on February 12-13, 2007 for the ELO dissolver. K-32 source measurements were obtained on October 24-25, 2006 for the UO2 powder dissolver and November 29-30, 2006 for the UO2 pellet dissolver. Attachment 2 summarizes the results and indicates that the 0.36 lb. NOx per Kg UO2 emission limit was not exceeded by any dissolver. Attachment 2 also summarizes the NOx emissions for CY2006 that indicate the 100 ton total NOx discharge limit also was not exceeded.

AREVA NP INC.
An AREVA and Siemens company

2101 Horn Rapids Road, Richland, WA 99354

Section 3.g and h – The Solid Waste Uranium Recovery (SWUR) facility average daily and monthly burn rates are attached for CY2006. The summary shows that the average feed rate did not exceed the 200 lb. per hour limit.

The completed Air Emissions Inventory forms are attached. Please do not hesitate to call me if there are any questions regarding the information submitted; I can be reached at 375-8452.

Best Regards,

Jim Perryman

Jim Perryman
Environmental Engineer

/mah

Enclosures

2006 Request for Air Emissions Information

Plant Number: J - 005 - 0027 Areva NP, Inc

Section 1: Facility Information

(Is the following complete and accurate? If not, correct any errors and provide any missing information.)

ADDRESS, PHYSICAL AND MAILING			
Physical Addr: (no PO Box)	2101 Horn Rapids Rd Richland, WA 99352	**Mailing Address:**	2101 Horn Rapids Rd Richland, WA 99352

TECHNICAL CONTACT			
Name:	Jim Perryman	**Fax:**	(509)375-8207
Phone Number:	(509)375-8452	**e-mail:**	James.Perryman@areva.com

NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS) CODE (one only)	
NAICS	**Industry Type**
325188	All Other Basic Inorganic Chemical Manufacturing

GEOGRAPHIC COORDINATES in Decimal Lat/Lon (Facility Front Door)			
Latitude: N	46.34889	**Longitude:** W	119.30028

CERTIFICATION OF DATA ACCURACY

Consistent with state law, the data presented here is accurate to the best of my knowledge. (Please submit this signed page with any electronic submissions.

Jim Perryman	Environmental Engineer	Jim Perryman	3/29/07
Print Name	**Title**	**Signature**	**Date**

Tables for many of the codes used in this form may be found at
http://www.ecy.wa.gov/programs/air/EmissionInventory/emisinv.htm

Plant Number: J - 005 - 0027 Areva NP, Inc
Point Number: 01 Dissolving UOX in Nitric Acid

Section 3: Emissions from Segments Information (Please use one page for each segment)

(Is the following complete and accurate? If not, correct any errors and provide any missing information.)

SCC Code: 30405099 **Segment Number:** 01
Miscellaneous Casting And Fabricating

	Process Information 2005	2006
Material (in Tons)	21	22.3

Insignificant Emissions Unit? (Y/N): 0
Comments: _____
Confidentiality: Is process data confidential (see RCW 70.94.205)? _____ Yes ___x___ No

CRITERIA POLLUTANT EMISSIONS and AMMONIA (Specify in tons per year, to nearest ton)

Criteria Pollutant	Emissions 2005	Emissions 2006	Estimation Code *see below	Control Equip. Code Primary	Control Equip. Code Secondary	Control Efficiency (%)
Particulate Total	0			99		99.95
PM_{10}	0			99		99.94999695
$PM_{2.5}$	0			99		99.95
SO_2	0					
NOx as NO_2	0	1.1		2		80
VOC, (reported as _____)	0					
CO	0					
NH_3 (ammonia)	0					

TOXIC POLLUTANT EMISSIONS (Specify in pounds per year)

Toxic Pollutant	CAS #	Emissions 2005	Emissions 2006	Est. Code*

J-005-0027-01-01

*** Emissions Estimation Method Codes**

Method	code	Method	code	Method	code
CEMS	1	EPA speciation profile	5	state/local emission factor	9
engineering judgment	2	state/local speciation profile	6	site-specific emission factor	10
material balance	3	manufacturer specification	7	vender emission factor	11
stack test	4	EPA emission factor	8	trade group emission factor	12

Plant Number: J - 005 - 0027 Areva NP, Inc
Point Number: 02 Dissolving UOX in Nitric Acid

Section 3: Emissions from Segments Information (Please use one page for each segment)

(Is the following complete and accurate? If not, correct any errors and provide any missing information.)

SCC Code: 30405099 **Segment Number:** 01
Miscellaneous Casting And Fabricating

	Process Information 2005	2006
Material (in Tons)	148	80

Insignificant Emissions Unit? (Y/N): 0
Comments: _____
Confidentiality: Is process data confidential (see RCW 70.94.205)? _____ Yes __X__ No

CRITERIA POLLUTANT EMISSIONS and AMMONIA (Specify in tons per year, to nearest ton)

Criteria Pollutant	Emissions 2005	Emissions 2006	Estimation Code *see below	Control Equip. Code Primary	Control Equip. Code Secondary	Control Efficiency (%)
Particulate Total	0			99		99.95
PM_{10}	0			99		99.94999695
$PM_{2.5}$	0			99		99.95
SO_2	0					
NOx as NO_2	5	2.7		2		80
VOC, (reported as _____)	0					
CO	0					
NH_3 (ammonia)	0					

TOXIC POLLUTANT EMISSIONS (Specify in pounds per year)

Toxic Pollutant	CAS #	Emissions 2005	Emissions 2006	Est. Code*

J-005-0027-02-01

*** Emissions Estimation Method Codes**

Method	code	Method	code	Method	code
CEMS	1	EPA speciation profile	5	state/local emission factor	9
engineering judgment	2	state/local speciation profile	6	site-specific emission factor	10
material balance	3	manufacturer specification	7	vender emission factor	11
stack test	4	EPA emission factor	8	trade group emission factor	12

Plant Number: J - 005 - 0027 Areva NP, Inc

Section 2: Emission Point Information

(Is the following complete and accurate? If not, correct any errors and provide any missing information.)

Emission Point No: 01 **Description:** Dissolving UOX in Nitric Acid K-56

Boiler Design Capacity (if applicable): **Units:**

POINT NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS) CODE (one only)	
NAICS	**Industry Type**
325188	All Other Basic Inorganic Chemical Manufacturing

POINT GEOGRAPHIC COORDINATES in Decimal Lat/Lon			
Latitude: N	**46.34944**	**Longitude:** W	**119.30028**

POINT OPERATING SCHEDULE (Quarterly throughput must equal 100 or 0 if not operating)

	2005	2006			2005	2006
Jan – Mar:	31	40	%	**Hrs/Day**	24	20
Apr – Jun:	29	21	%	**Days/Wk:**	4	4
Jul – Sep:	18	9	%	**Wks/Yr:**	50	42
Oct – Dec:	22	30	%			
	100	100	%			

STACK PARAMETERS (if applicable)

	2005	2006			2005	2006	
Temperature:	80	80	°F	**Flow Rate:**	12	12	ACFS**
Water Vapor:	2	2	%	**Oxygen, Dry:**			%
Height:	50	50	ft	**Plume Height:**			ft
Diameter:	1	1	ft	(if no stack)			

** Actual Cubic Feet per Second

CONTROL EQUIPMENT (Please associate with the proper segments on next page(s))

Code	Description
2	Wet Scrubber - Medium Efficiency
99	Miscellaneous Control Devices

Plant Number: J - 005 - 0027 Areva NP, Inc

Section 2: Emission Point Information

(Is the following complete and accurate? If not, correct any errors and provide any missing information.)

Emission Point No: 02 **Description:** Dissolving UOX in Nitric Acid K-32

Boiler Design Capacity (if applicable): **Units:**

POINT NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS) CODE (one only)	
NAICS	**Industry Type**
325188	All Other Basic Inorganic Chemical Manufacturing

POINT GEOGRAPHIC COORDINATES in Decimal Lat/Lon			
Latitude: N	**46.34944**	**Longitude:** W	**119.30028**

POINT OPERATING SCHEDULE (Quarterly throughput must equal 100 or 0 if not operating)

	2005	2006			2005	2006
Jan – Mar:	21	34	%	**Hrs/Day**	24	24
Apr – Jun:	18	36	%	**Days/Wk:**	7	7
Jul – Sep:	29	2	%	**Wks/Yr:**	32	40
Oct – Dec:	32	28	%			
	100	100	%			

STACK PARAMETERS (if applicable)

	2005	2006			2005	2006	
Temperature:	92	92	°F	**Flow Rate:**	42	42	ACFS**
Water Vapor:	4	4	%	**Oxygen, Dry:**			%
Height:	77	77	ft	**Plume Height:**			ft
Diameter:	2	2	ft	(if no stack)			

** Actual Cubic Feet per Second

CONTROL EQUIPMENT (Please associate with the proper segments on next page(s)

Code	Description
2	Wet Scrubber - Medium Efficiency
99	Miscellaneous Control Devices

Attachment 1

	ELO DISSOLVERS			UO2 DISSOLVERS				UDISSOLV.XLS			
	GSUR		12 month sum	UNH		12 month sum	PD		12 month sum	UNH+PD 12 month sum	Overall Combined 12 month total
Date	Kg - U	Kg - UO2	Kg-UO2	Kg - U	Kg - UO2	Kg - UO2	Kg - U	Kg - UO2	Kg - UO2	Kg - UO2	Kg - UO2
Jan-05	722	819	819	3079	3493	3493	5794	6573	6573	10066	10886
Feb-05	1872	2124	2943	0	0	3493	5350	6070	12643	16136	19079
Mar-05	2728	3095	6038	0	0	3493	11048	12534	25177	28670	34708
Apr-05	1092	1239	7277	0	0	3493	4021	4562	29739	33232	40508
May-05	2033	2306	9583	5062	5743	9236	5077	5760	35499	44734	54318
Jun-05	1765	2002	11586	2629	2983	12219	4634	5257	40756	52974	64560
Jul-05	324	368	11953	2885	3273	15492	6301	7148	47904	63396	75349
Aug-05	1372	1557	13510	5364	6085	21577	5395	6121	54025	75602	89112
Sep-05	1309	1485	14995	2896	3286	24863	10904	12371	66395	91258	106253
Oct-05	879	997	15992	7143	8104	32966	5641	6400	72795	105761	121753
Nov-05	1818	2063	18054	1306	1482	34448	9814	11134	83929	118377	136432
Dec-05	1020	1157	19212	4377	4966	39414	10120	11481	95410	134824	154036
Jan-06	2738	3106	21499	0	0	35921	933	1058	89896	125816	147315
Feb-06	2474	2807	22182	4315	4895	40816	6335	7187	91013	131829	154011
Mar-06	2605	2955	22042	2767	3139	43955	7584	8604	87083	131038	153080
Apr-06	1686	1913	22716	3181	3609	47564	7527	8539	91061	138625	161341
May-06	1559	1769	22178	2783	3157	44978	9463	10736	96037	141015	163193
Jun-06	0	0	20176	0	0	41996	0	0	90779	132775	152951
Jul-06	0	0	19808	0	0	38723	0	0	83631	122354	142162
Aug-06	325	369	18621	0	0	32637	0	0	77510	110147	128768
Sep-06	1186	1346	18481	336	381	29733	637	723	65862	95595	114076
Oct-06	2403	2726	20210	5930	6728	28357	1338	1518	60981	89337	109547
Nov-06	1770	2008	20156	5775	6552	33427	0	0	49847	83273	103429
Dec-06	1112	1262	20260	2551	2894	31355	2776	3149	41515	72870	93130

GSUR = Gadolinia Scrap Uranium Recovery dissolvers in the ELO Building
UNH = Uranium oxide powder dissolvers in the UO2 Building (Uranyl Nitrate Hexahydrate)
PD = Uranium oxide pellet dissolver in the UO2 Building

Attachment 2

2006 STACK NOX EMISSION SUMMARY

Stack No.	Dissolvers	NOX Emission Rate	Dissolver Feed Rate	Average # NOX / Kg UO2	Total Annual Kg UO2	Total Annual # NOX
K-56	ELO-GSUR	0.368 # per hour (Average of 8 batches)	3.5 Kg/hr	**0.105**	20260	2127
K-32	UO2 Pellet	3.90 # per hour (Average over 5.6 hours)	38.0 Kg/hr	**0.103**	41515	4276
K-32	UO2 Powder	0.64 # per batch (Average of 10 batches)	17.3 Kg/batch	**0.037**	31355	1160
Total						**7563** **3.8 tons**

SWUR Average Daily And Monthly Burn Rates

Monday, April 09, 2007

Month	Date	Pounds Burned	Average Rate	Days Active
April,2006				
	04/19/2006	810.4	33.8 lbs/hr	
	04/20/2006	1621.6	67.6 lbs/hr	
	04/21/2006	1068.1	44.5 lbs/hr	
	04/24/2006	271.9	11.3 lbs/hr	
	04/25/2006	2971.5	123.8 lbs/hr	
	04/26/2006	2838.1	118.3 lbs/hr	
	04/27/2006	2632.5	109.7 lbs/hr	
	04/28/2006	895.0	37.3 lbs/hr	
		13109.1	**546.2 lbs/hr**	**8**
May,2006				
	05/01/2006	1853.3	77.2 lbs/hr	
	05/02/2006	2656.3	110.7 lbs/hr	
	05/03/2006	2768.3	115.3 lbs/hr	
	05/04/2006	2043.1	85.1 lbs/hr	
	05/10/2006	1459.6	60.8 lbs/hr	
	05/11/2006	1516.5	63.2 lbs/hr	
	05/16/2006	75.7	3.2 lbs/hr	
	05/22/2006	479.2	20.0 lbs/hr	
	05/23/2006	2429.6	101.2 lbs/hr	
	05/24/2006	2320.4	96.7 lbs/hr	
	05/25/2006	2558.7	106.6 lbs/hr	
	05/26/2006	638.6	26.6 lbs/hr	
	05/30/2006	718.8	30.0 lbs/hr	
	05/31/2006	2470.5	102.9 lbs/hr	
		23988.6	**999.5 lbs/hr**	**14**
June,2006				
	06/01/2006	2163.9	90.2 lbs/hr	
	06/02/2006	860.6	35.9 lbs/hr	
	06/05/2006	1564.0	65.2 lbs/hr	
	06/06/2006	3140.5	130.9 lbs/hr	
	06/07/2006	2989.8	124.6 lbs/hr	
	06/08/2006	2906.7	121.1 lbs/hr	
	06/09/2006	1157.3	48.2 lbs/hr	
	06/12/2006	2289.8	95.4 lbs/hr	
	06/13/2006	3038.8	126.6 lbs/hr	
	06/14/2006	2800.4	116.7 lbs/hr	
	06/15/2006	2951.9	123.0 lbs/hr	
	06/16/2006	683.6	28.5 lbs/hr	
	06/19/2006	1929.7	80.4 lbs/hr	
	06/20/2006	2579.7	107.5 lbs/hr	
	06/21/2006	2885.0	120.2 lbs/hr	
	06/22/2006	2984.0	124.3 lbs/hr	
	06/23/2006	1133.2	47.2 lbs/hr	
	06/26/2006	1723.7	71.8 lbs/hr	
	06/27/2006	2915.4	121.5 lbs/hr	
	06/28/2006	2719.4	113.3 lbs/hr	
	06/29/2006	1964.5	81.9 lbs/hr	
		47381.8	**1974.2 lbs/hr**	**21**

Month	Date	Pounds Burned	Average Rate	Days Active
September,2006				
	09/25/2006	38.3	1.6 lbs/hr	
	09/26/2006	613.2	25.6 lbs/hr	
	09/27/2006	3117.9	129.9 lbs/hr	
	09/28/2006	2335.1	97.3 lbs/hr	
		6104.5	**254.4 lbs/hr**	**4**
October,2006				
	10/02/2006	809.2	33.7 lbs/hr	
	10/03/2006	2998.4	124.9 lbs/hr	
	10/04/2006	3156.5	131.5 lbs/hr	
	10/05/2006	2027.5	84.5 lbs/hr	
	10/11/2006	2616.4	109.0 lbs/hr	
	10/12/2006	1297.6	54.1 lbs/hr	
	10/16/2006	725.3	30.2 lbs/hr	
	10/17/2006	2132.0	88.8 lbs/hr	
		15762.9	**656.8 lbs/hr**	**8**
November,2006				
	11/06/2006	143.2	6.0 lbs/hr	
	11/07/2006	2345.2	97.7 lbs/hr	
	11/08/2006	3108.1	129.5 lbs/hr	
	11/09/2006	2485.2	103.6 lbs/hr	
	11/13/2006	1165.4	48.6 lbs/hr	
	11/14/2006	3427.4	142.8 lbs/hr	
	11/15/2006	3184.1	132.7 lbs/hr	
	11/16/2006	2413.5	100.6 lbs/hr	
	11/27/2006	902.3	37.6 lbs/hr	
	11/28/2006	3622.3	150.9 lbs/hr	
	11/29/2006	3207.9	133.7 lbs/hr	
	11/30/2006	2423.2	101.0 lbs/hr	
		28427.8	**1184.5 lbs/hr**	**12**
December,2006				
	12/04/2006	807.7	33.7 lbs/hr	
	12/05/2006	3073.7	128.1 lbs/hr	
	12/06/2006	2751.1	114.6 lbs/hr	
	12/07/2006	2848.4	118.7 lbs/hr	
	12/08/2006	97.9	4.1 lbs/hr	
		9578.9	**399.1 lbs/hr**	**5**
	Grand Totals	**144353.6**	**6014.7 lbs/hr**	**72**