



DUKE COGEMA
STONE & WEBSTER

Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

15 November 2002
DCS-NRC-000118
Response Required: No

SUBJECT: Docket Number 070-03098
Duke Cogema Stone and Webster
Mixed Oxide Fuel Fabrication Facility
Corrections to Responses to the Request for Additional Information on the
Environmental Report Revisions 1 & 2

Reference: Peter S. Hastings (DCS) letter to U.S. Nuclear Regulatory Commission Document
Control Desk, *Responses to the Request for Additional Information on the
Environmental Report Revisions 1 & 2*, 29 October 2002

On 29 October 2002, Duke Cogema Stone and Webster (DCS) provided responses to the U.S. Nuclear
Regulatory Commission (NRC) Request for Additional Information dated 03 October 2002. We have
recently received updated information from the designers of the Waste Solidification Building that
updates information provided in Attachment 55 of those responses. That updated information is
provided as an enclosure to this letter. We would also like to provide a correction to page 32 of the
responses. This also is an enclosure to this letter.

If you have any questions, please contact me at 704-373-7820 or Mary Birch at 704-382-1401.

Sincerely,

Peter S. Hastings, P.E.
Manager, Licensing and Safety Analysis

Enclosures: 1) Update to Attachment 55
2) Correction to RAI Responses Page 32

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Attachment 55, SUMMARY OF WASTE SOLIDIFICATION BUILDING ANNUAL
NON-RADIOLOGICAL OPERATING EMISSIONS, page 2 correction

PDCF HAW			
One Batch's time in facility (wks) 2			
Component	Amount per batch (kg)	Average Conc. Per wk (ug/cuft)	Average Conc. Per wk (ug/m^3)
Acetone	0.117	1.24E-01	4.44E+00
Hydrogen	Dominated by High Alpha		
MOX High Alpha			
One Batch's time in facility (wks) 2			
Component	Amount per batch (kg)	Average Conc. Per wk (ug/cuft)	Average Conc. Per wk (ug/m^3)
TBP	0.571	6.06E-01	2.16E+01
Hydrogen	2.16E-02	2.30E-02	8.11E-01
MOX SU			
One Batch's time in facility (wks) 2			
Component	Amount per batch (kg)	Average Conc. Per wk (ug/cuft)	Average Conc. Per wk (ug/m^3)
TBP	0.083	8.81E-02	3.15E+00
Hydrogen	Dominated by High Alpha		

Non-Facility Specific Emissions -

Diesel emissions – The upper range estimate for the WSB describes a 750 kW diesel generator, where as the lower range estimate is a 600 kW generator. For purposes of this exercise, the manufacture's data for an 800 kW diesel generator will be used, which will bound both scenarios.

An estimated 250 run-hours per year will be used to describe the maximum number of hours/year this machine would encounter in this type service (standby diesel). This value was selected based on actual operating hours for the 235-F and 292-2F diesels.

800 kW Diesel Generator Emission Rates

Pollutants	NOx	PM plus PM-10	CO	SO2	VOC
Total Emissions (lbs./hour)	24.92	4.24	5.07	1.62	0.4409
Emissions (lbs.) @ 250 Hours	6230	1060	1268	405	111

Cement Process Emissions – The cement storage, handling, and process equipment are potential sources of Particulate Matter and PM-10 (particulate matter <10 microns) emissions. These emissions would result from material transfers through the process.

RESPONSE:

The table from the October 26, 2001 Responses to Clarification of Item 29 is updated as follows:

Building	Finish Floor Elev (ft MSL)	Building Height (ft)	Roof Elevation (ft MSL)	CAR Figures (11.1-xx)
BMP	273	77.5	350.5	16, 17, 18
BAD	270.8	26	296.8	35, 36
BTS	273	26	299	38, 39
BSW	272	26	298	37
BRW	272	26	298	41
BRP	272	20	291	34
BEG	271	26	297	33
BSG	270.5	26	296.5	40

64. Provide plot plan and elevation and height data for all structures within 5 stack heights of the PDCF stack(s).

RESPONSE:

The best publicly available information for the PDCF is in the SPD EIS Sections 2.4.1.1 and 2.7. Air quality impacts were estimated in the SPD EIS assuming ground releases.

65. Provide plot plan and elevation and height data for all structures within 5 stack heights of the WSB, if there is a stack(s).

RESPONSE:

The location of the WSB is provided in Attachment 8a and 8b. An elevation of the WSB is provided in Attachment 65. The main WSB stack will be 80 ft high. The only other buildings near the WSB will be the PDCF. The best publicly available information for the PDCF is in the SPD EIS Sections 2.4.1.1 and 2.7. Air quality impacts for the WSB were estimated in the MFFF ER using ground releases.

66. Provide the following data on the modeling conducted for the 1998 update of air dispersion modeling for SRS permitted air emission sources.

- a) Clarification on whether the modeled ambient boundary concentrations were based on measured 1998 emission levels for each source, or were based on maximum permitted emission levels.
- b) Additional information on new sources hydrazine or hydrazine compounds permitted at SRS since the 1998 modeling effort (e.g., annual emission amounts, modeled ambient SRS boundary concentrations) because hydrazine is a MOX-related chemical.
- c) Additional or updated ambient air concentration estimates for toxic air pollutants at SRS have been generated, please provide.