

**From:** "Ernest S. Chaput" <esandc@prodigy.net>  
**To:** <TEH@NRC.gov>  
**Date:** 4/20/03 11:56PM  
**Subject:** Draft MOX facility EIS - Environmental Justice Analysis

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April 10, 2003

Mr. Tim Harris  
Division of Waste Management  
U. S. Nuclear Regulatory Commission  
Washington, DC 20555

2/28/03  
68 FR 9728  
14

**SUBJECT:** Draft Report for Comment - Environmental Impact Statement on the Construction and Operation of a Mixed Oxide Fuel Fabrication Facility at the Savannah River Site, South Carolina

Dear Mr. Harris:

During NRC's March 26 public meeting on the subject document we had a brief opportunity to discuss the environmental justice section in the Draft EIS. The purpose of this letter is to summarize my questions and solicit your assistance in understanding the material included in the draft EIS.

Section 4.3.7.3.3 (page 4-57) of the draft EIS states "In the unlikely event of a tritium release at the PDCF or an explosion at the MOX facility, the communities most likely affected would be minority or low income, given the demographics within 80 km (50 mi) of the proposed MOX facility." The data contained in the draft EIS does not support that conclusion. To the contrary, I have used your data to perform a summary analysis which finds that minority and low income populations are less likely than other populations to be affected by an accident in the MOX or PCDF facility. I am not stating that an environmental justice concern does or does not exist, rather I contend that the data in the draft EIS does not support your conclusion.

In performing my analysis I considered wind direction and probability (Figure 3.5), population by sector (Table E.8) and areas with disproportionate minority or low income population concentrations (Figures 4.1 and 4.2). I used a probabilistic approach to determine the number of persons in each sector downwind of an SRS accident (wind direction and total sector population). I sorted the sectors as minority-low income or other, and totaled the number of people in each category. My analysis resulted in:

- \* 24,900 persons in predominately minority and/or low income sectors downwind of SRS and
- \* 37,000 persons in sectors which are not predominately minority and/or low income downwind of SRS

If offsite health impacts result from windborne contamination, then there is no disproportionate impact on minority-low income populations. A complete copy of my analysis is attached.

Template = ADM-013

E-RIS = ADM-03  
Call = A. Harris (TEH)  
A. Lester (ACK1)

While my analysis is simplistic, it is sufficient to identify the need for a more complete analysis and discussion of this important issue in the EIS. Specifically an analysis of the population in each census block would be helpful, including the effects of distance (dispersion, decay and dilution) from SRS. If your preliminary conclusion is supported, it should be carefully considered in NRC's decision-making. If the preliminary conclusion is not supported, then the discussion should be removed from the final EIS.

Thank you for the opportunity to raise this question and I look forward to your response. Please contact me if you have any questions or comments (telephone 803-648-5402, email [esandc@prodigy.net](mailto:esandc@prodigy.net), fax 803-649-5774).

Sincerely

Ernest S. Chaput

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## Attachment:

Sector	Wind	Total	Predominately Minority or	Impacted	Impacted
	Probability		Low-Income Sector	E-J	Other
	(%)	Population	(Yes - No)	Population	Population
S	0.035	20,996	yes	735	
SSW	0.065	17,515	yes	1,138	
SW	0.095	18,010	yes	1,711	
WSW	0.070	25,049	yes	1,753	
W	0.055	55,221	no		3,037
WNW	0.050	309,928	50-50	7,748	7,748
NW	0.050	186,214	no		9,311
NNW	0.060	71,498	no		4,290
N	0.070	84,204	no		5,894
NNE	0.070	42,704	no		2,989
NE	0.080	35,409	no		2,833
ENE	0.090	75,949	yes	6,835	
E	0.080	44,386	yes	3,551	
ESE	0.065	13,978	no		909
SE	0.035	33,652	yes	1,178	
SSE	0.030	7,770	yes	233	

Total	1.000	1,042,483	24,883	37,011
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**Wind Probability – Estimated from Figure 3.5**

**Total Population by Sector – From Table E-8**

**Predominately Minority or Low-Income Sector – By examination of Figures 4.1 and 4.2**

**The WNW sector includes the city of Augusta and Columbia County, GA. This large sector has diverse demographics, but is estimated to be about ½ minority and/or low income and about ½ all other.**