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 50-270 Oconee Nuclear Station, Unit 2, Duke Power Co. 05000270  
 50-287 Oconee Nuclear Station, Unit 3, Duke Power Co. 05000287  
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 PARKER, W.O. Duke Power Co.  
 RECIP. NAME RECIPIENT AFFILIATION  
 DENTON, H.R. Office of Nuclear Reactor Regulation, Director  
 REID, R.W. Operating Reactors Branch 4

SUBJECT: Forwards addendum, adding nonexempt quantities of oil, to  
 800519 request for permission to dispose of contaminated oil  
 by burning.

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DUKE POWER COMPANY

POWER BUILDING

422 SOUTH CHURCH STREET, CHARLOTTE, N. C. 28242

WILLIAM O. PARKER, JR.  
VICE PRESIDENT  
STEAM PRODUCTION

August 4, 1980

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Mr. Harold R. Denton, Director  
Office of Nuclear Reactor Regulation  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Attention: Robert W. Reid, Chief  
Operating Reactors Branch No. 4

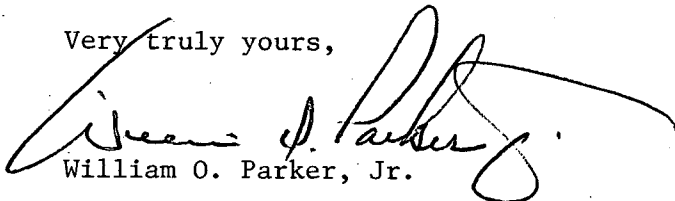
Subject: Oconee Nuclear Station  
Docket Nos. 50-269, -270, -287

Dear Sir:

My letter of May 19, 1980 provided documentation supporting a request to dispose of exempt quantities of contaminated oil by burning. Following telephone discussions on this subject with the NRC Staff on July 29, 1980, Duke Power Company has decided to add non-exempt quantities of the oil to the request. This has been done at the suggestion of the NRC Staff.

Pursuant to 10CFR 20, §20.302, attached is an addendum to the original request of May 19, 1980 which supports the disposal of non-exempt contaminated oil by burning. This information supplements the original request, which provided a check in the amount of \$4,000 as the required license fee pursuant to 10CFR 170, §170.22. Therefore, no additional fees are enclosed.

Very truly yours,



William O. Parker, Jr.

FTP:scs  
Attachment

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8008110429

ADDENDUM TO REQUEST OF MAY 19, 1980  
FOR BURNING OF CONTAMINATED OIL

This is an addendum to the original request for permission to incinerate low level radioactively contaminated oil. The enclosed Table II contains the radioisotopic analysis for the remaining drums of contaminated RCP oil presently onsite at ONS. These drums will be handled similarly to the drums of exempt quantity oil discussed in our original request.

- 1) The oil will be filtered and placed in different drums.
- 2) The filtered oil will be resampled and labeled to identify the radioisotopic assay.
- 3) The oil will be fed to the suction side of the normal oil feed pump of the auxiliary boiler having established steady state operation with #2 fuel oil.
- 4) The rate of oil feed and the radioisotopic concentration in the oil will be controlled such that the Tech Spec limits for the radioisotopes present in the oil will not be surpassed.

If we assume that the waste oil is fed to the boiler with no dilution by the number 2 fuel oil at the maximum possible feed rate of 18.8 gpm, then the maximum allowable concentration of the most restrictive radionuclide, CS-134 ( $MPC = 4 \times 10^{-10} \mu\text{Ci/ml}$ ), will be  $3.946\text{E-}5 \mu\text{Ci/ml}$ . The concentrations will be known from the gamma isotopic analyses run on the samples after filtration and

we will assume that all of the activity leaves the stack as particulates. The total activity of the oil will be added to our normal airborne particulate releases. The total activity of the oil prior to filtration is 1.44% of our present Technical Specifications annual limit for airborne particulate. This value is very conservative with respect to what will be released since it is based on the assumption that each drum contains exactly 55 gal. of oil. The actual volume of oil is something less than that.

TABLE II  
CONTAMINATED OIL SAMPLES

Sample No.	MN-54 a) $\mu\text{Ci/ml}$ b) $\mu\text{Ci/55 gal}$	CO-57 a) $\mu\text{Ci/ml}$ b) $\mu\text{Ci/55 gal}$	CO-58 a) $\mu\text{Ci/ml}$ b) $\mu\text{Ci/55 gal}$	CO-60 a) $\mu\text{Ci/ml}$ b) $\mu\text{Ci/55 gal}$	AG-110M a) $\mu\text{Ci/ml}$ b) $\mu\text{Ci/55 gal}$	CS-134 a) $\mu\text{Ci/ml}$ b) $\mu\text{Ci/55 gal}$	CS-137 a) $\mu\text{Ci/ml}$ b) $\mu\text{Ci/55 gal}$
1	<MDA*	<MDA	<MDA	$\frac{1.847\text{E-5}}{3.845}$	<MDA	$\frac{4.276\text{E-6}}{8.903\text{E-1}}$	$\frac{1.957\text{E-5}}{4.074}$
3	<MDA	<MDA	$\frac{1.735\text{E-6}}{3.612\text{E-1}}$	$\frac{1.305\text{E-6}}{2.717\text{E-1}}$	<MDA	$\frac{5.154\text{E-6}}{1.073}$	$\frac{1.615\text{E-5}}{3.362}$
4	<MDA	<MDA	<MDA	<MDA	<MDA	$\frac{1.822\text{E-5}}{3.793}$	$\frac{5.579\text{E-5}}{1.161}$
5	<MDA	<MDA	<MDA	$\frac{7.153\text{E-5}}{1.489\text{E-1}}$	<MDA	$\frac{1.388\text{E-3}}{2.890\text{E-2}}$	$\frac{5.716\text{E-3}}{1.190\text{E-3}}$
10	<MDA	<MDA	<MDA	$\frac{1.120\text{E-5}}{2.332}$	<MDA	$\frac{9.494\text{E-6}}{1.977}$	$\frac{3.427\text{E-5}}{7.135}$
13	<MDA	<MDA	<MDA	<MDA	<MDA	$\frac{6.369\text{E-6}}{1.326}$	$\frac{2.063\text{E-5}}{4.295}$
15	<MDA	<MDA	<MDA	<MDA	<MDA	$\frac{3.242\text{E-5}}{6.750}$	$\frac{9.318\text{E-5}}{1.94\text{E-1}}$
27	<MDA	<MDA	<MDA	<MDA	<MDA	$\frac{1.163\text{E-5}}{2.421}$	$\frac{8.484}{1.182\text{E-5}}$
33	<MDA	<MDA	<MDA	$\frac{2.839\text{E-6}}{5.912\text{E-1}}$	<MDA	$\frac{2.228\text{E-4}}{4.639\text{E-1}}$	$\frac{7.715\text{E-4}}{1.606\text{E-2}}$
34	<MDA	<MDA	<MDA	<MDA	<MDA	$\frac{4.357\text{E-5}}{9.071}$	$\frac{1.437\text{E-4}}{2.992\text{E-1}}$
37	<MDA	<MDA	<MDA	<MDA	<MDA	$\frac{2.366\text{E-5}}{4.926}$	$\frac{7.037\text{E-5}}{1.465\text{E-1}}$
38	$\frac{9.789\text{E-5}}{2.038\text{E-1}}$	<MDA	$\frac{4.540\text{E-5}}{9.452}$	$\frac{1.801\text{E-4}}{3.750\text{E-1}}$	<MDA	$\frac{8.742\text{E-3}}{1.820\text{E-3}}$	$\frac{1.881\text{E-2}}{3.916\text{E-3}}$
39	<MDA	<MDA	$\frac{3.771\text{E-4}}{7.851\text{E-1}}$	$\frac{2.204\text{E-3}}{4.589\text{E-2}}$	<MDA	$\frac{1.129\text{E-2}}{2.351\text{E-3}}$	$\frac{2.378\text{E-2}}{4.951\text{E-3}}$
40	$\frac{5.397\text{E-5}}{1.124\text{E-1}}$	$\frac{5.605\text{E-6}}{1.240\text{E-1}}$	$\frac{8.726\text{E-5}}{1.817\text{E-1}}$	$\frac{3.675\text{E-4}}{7.651\text{E-1}}$	<MDA	$\frac{2.242\text{E-4}}{4.668\text{E-1}}$	$\frac{4.933\text{E-4}}{1.027\text{E-2}}$

TABLE II (continued)  
CONTAMINATED OIL SAMPLES

Sample No.	MN-54	CO-57	CO-58	CO-60	AG-110M	CS-134	CS-137
	a) $\mu\text{Ci/ml}$ b) $\mu\text{Ci/55 gal}$	a) $\mu\text{Ci/ml}$ b) $\mu\text{Ci/55 gal}$	a) $\mu\text{Ci/ml}$ b) $\mu\text{Ci/55 gal}$	a) $\mu\text{Ci/ml}$ b) $\mu\text{Ci/55 gal}$	a) $\mu\text{Ci/ml}$ b) $\mu\text{Ci/55 gal}$	a) $\mu\text{Ci/ml}$ b) $\mu\text{Ci/55 gal}$	a) $\mu\text{Ci/ml}$ b) $\mu\text{Ci/55 gal}$
41	$4.274\text{E-}6$ $8.898\text{E-}1$	$7.666\text{E-}7$ $1.596\text{E-}1$	$5.866\text{E-}6$ $1.221\text{E } 1$	$6.875\text{E-}5$ $1.431\text{E } 1$	$2.028\text{E-}5$ $4.223$	$3.316\text{E-}5$ $6.908$	$1.134\text{E-}4$ $2.361\text{E } 1$
43	$1.399\text{E-}6$ $2.913\text{E-}1$	<MDA	<MDA	$5.843\text{E-}6$ $1.216$	<MDA	$4.055\text{E-}6$ $8.442\text{E-}1$	$8.794\text{E-}6$ $1.831$
46	<MDA	<MDA	<MDA	<MDA	<MDA	$5.177\text{E-}5$ $1.078\text{E } 1$	$1.686\text{E-}4$ $3.510\text{E } 1$
Table II Sub. Tot.	$3.28\text{E } 1$	$1.256\text{E } 1$	$1.827\text{E } 4$	$6.104\text{E } 2$	$4.223$	$4.604\text{E } 3$	$1.046\text{E } 4$
Tot. $\mu\text{Ci}^{**}$ from Tables I & II	$3.280\text{E } 1$	$1.256\text{E } 1$	$1.190\text{E } 2$	$6.131\text{E } 2$	$4.223$	$4.609\text{E } 3$	$1.048\text{E } 4$

\*MDA Values for 1 liter samples

CO-58  $1.76\text{E-}7\mu\text{Ci}$   
CO-60  $1.76\text{E-}7\mu\text{Ci}$   
CS-134  $1.76\text{E-}7\mu\text{Ci}$   
CS-137  $2.61\text{E-}7\mu\text{Ci}$

\*\*Based on the conservative assumption that all of the drums contain 55 gal. of oil.