

August 28, 1989

**TABLE I  
GAS & PARTICULATE EFFLUENTS  
JANUARY 1, 1989, THROUGH JUNE 30, 1989**

<u>Release Point</u>	<u>Measurement Basis*</u>	<u>Effluent</u>	<u>Emission (Curies)</u>
HTGR Fuel Fabrication Facility (SV-A)	(1) (3) (4)	U <sup>235</sup> (93% enriched), thorium-232 & daughters	3.14 x 10 <sup>-6</sup>
SV-B	(1) (3) (4)	U <sup>235</sup> (93% enriched), depleted uranium, thorium-232 & daughters	1.52 x 10 <sup>-6</sup>
TRIGA Fuel Fab Facility	(1) (3) (4)	U <sup>235</sup>	2.40 x 10 <sup>-6</sup>
Hot Cell	(1) (3) (4)	Mixed fission products	2.45 x 10 <sup>-5</sup>
	(1) (3) (4)	I-131	3.51 x 10 <sup>-6</sup>
	(2)	H-3	1 x 10 <sup>-3</sup>
	(1)	Kr-85	1.05
Experimental Area Building (EA-1)	(2)	H-3	2.5 x 10 <sup>-4</sup>
	(2)	C-14	1 x 10 <sup>-5</sup>
	(2)	Mixed fission products	1 x 10 <sup>-5</sup>
	(2)	Mixed activation products	1 x 10 <sup>-5</sup>
	(2)	U <sup>235</sup>	4.0 x 10 <sup>-8</sup>
	(2)	Th-232	2 x 10 <sup>-8</sup>
Experimental Area Building - EA-1 Bunker	(1)	Sr-90/Y-90	1.62 x 10 <sup>-7</sup>
TRIGA Reactor Facility	(1)	Ar-41 Mark I & Mark F	9.54 x 10 <sup>-1</sup>
	(3) (4)	Mixed fission products (Mark F)	5.69 x 10 <sup>-6</sup>

\* (1) Measured. (2) Estimated. (3) This value includes both measured values and values that were below our limits of detection which is an overestimate. (4) From gross alpha plus gross beta results.

Table I (Continued)

<u>Release Point</u>	<u>Measurement Basis*</u>	<u>Effluent</u>	<u>Emission (Curies)</u>
TRIGA Fuel Development	(2)	Kr-85	0
Research Labs (no work	(2)	Xe-133	0
with unencapsulated	(2)	Mixed fission products	0
radioactive material		(other than Xe-133 &	
during this period)		Kr-85)	
Sorrento Electronics	(1)	Kr-85	0
10240 and 10247 Flanders	(1)	Xe-133	0
Drive			
Waste Processing Facility	(1)	Radionuclides Z=1-103	$7.50 \times 10^{-7}$
Science Laboratories	(2)	U <sup>235</sup>	$1.2 \times 10^{-7}$
	(2)	Th-232	0
	(2)	H-3	0
	(2)	U <sup>238</sup>	$1.2 \times 10^{-7}$
Building 10 (Calibration	(1)	H-3	$2 \times 10^{-4}$
Facility)			
Test Tower	(2)	Mixed fission products	$1.0 \times 10^{-6}$
	(2)	Mixed activation products	$1.0 \times 10^{-6}$
Fusion (Building 34)	(2)	H-3	$7.0 \times 10^{-2}$

\* (1) Measured. (2) Estimated. (3) This value includes both measured values and values that were below our limits of detection which is an overestimate. (4) From gross alpha plus gross beta results.

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**TABLE II**  
**LIQUID EFFLUENTS**  
**JANUARY 1, 1989, THROUGH JUNE 30, 1989**

<u>Release Point</u>	<u>Effluent Radionuclides</u>	<u>Emission (Curies)</u>
HTGR Fuel Fabrication Facility (Building 37, Sorrento Valley)	U <sup>235</sup> , thorium	3.3 x 10 <sup>-9</sup>
Main Site	Radionuclides Z=3-103	9.728 x 10 <sup>-3</sup>
	<b>TOTAL</b>	<b>9.728 x 10<sup>-3</sup></b>

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TABLE III  
NON-RADIOLOGICAL EFFLUENT DATA  
JANUARY 1, 1989, THROUGH JUNE 30, 1989

A. Suspended Particulates

<u>Date of Sample Collection</u>	<u>No. of Samples</u>	<u>Particulate Concentration Range (<math>\mu\text{g}/\text{M}^3</math>)</u>	<u>Arithmetic Mean (<math>\mu\text{g}/\text{M}^3</math>)</u>
6/5/89 - 6/9/89	16	18 to 95*	39

B. Hydrogen Chloride in Air

No samples collected; HCl furnace not in operation during this report period.

\* There has been heavy construction at sites near General Atomics. This construction is not related to GA activities.

NO.	FACILITY
1	ADMINISTRATION
2	LABORATORY
9	EXPERIMENTAL
11	SERVICE AND RECEPTION CENTER
13,14,15	T.O. COMPLEX
21	TRIGA REACTORS
22	TRIGA FUEL FAB
23	HOT CELLS
25	WASTE PROCESSING—MS
27	EA-1
30	LINAC
31	ECF
34	DOUBLET III
35	TEST TOWER
37	SV—A (FUEL MANUFACTURING)
39	SV—B
41	WASTE PROCESSING—SV

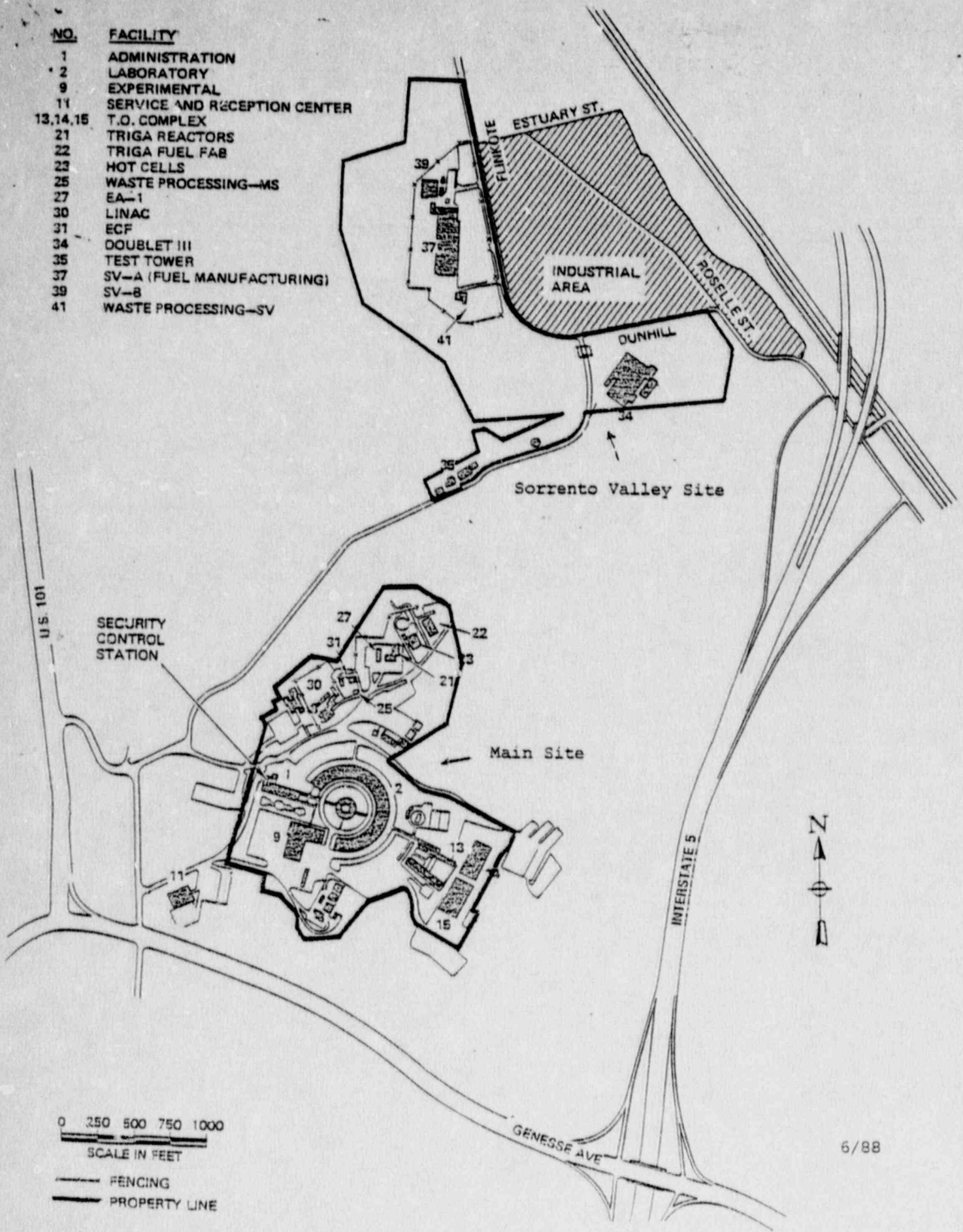


Fig. 1 - Plan View of Sites