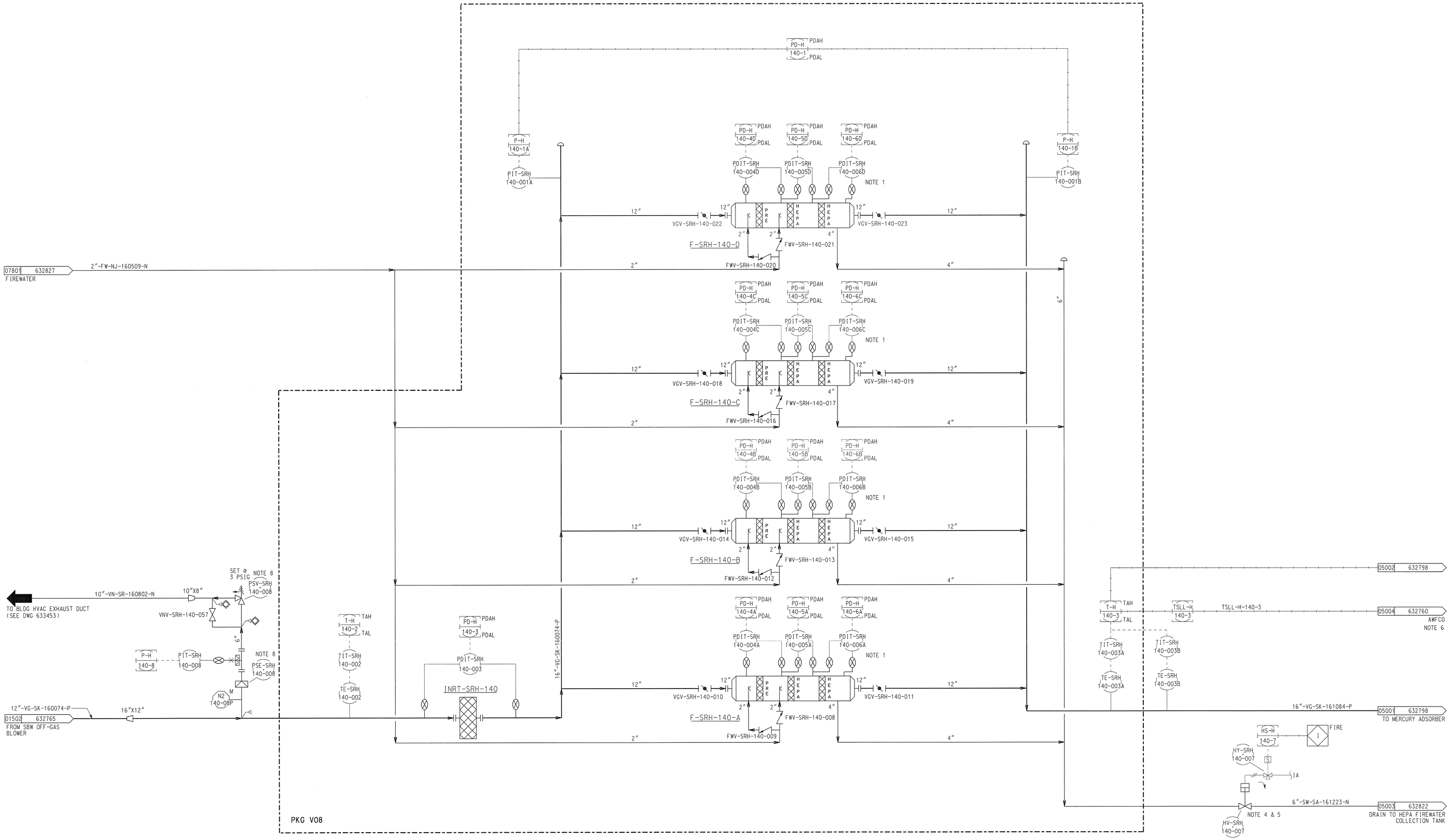
632797

INRT-SRH-140
PROCESS HEPA FIRE SCREEN
DESIGN GAS FLOWRATE: 6760 ACFM

F-SRH-140-A/-B/-C/-D
PROCESS HEPA
FILTERS
DESIGN GAS FLOWRATE:2500 ACFM
(2 PARALLEL ELEMENTS PER FILTER
@ 1,250 ACFM EACH)




| REV | DATE | DESCRIPTION | BY/CHK'D |
|---|---|---|---|
| 0 | 10/12/06 | ISSUED FOR DESIGN FREEZE | |

## NOTES

1. EACH HEPA FILTER HAS THE FOLLOWING FEATURES THAT ARE NOT SHOWN: PROVISIONS FOR PERIODIC RADIATION TESTS: DOP TEST PORTS UPSTREAM AND DOWNSTREAM OF EACH HEPA: PROVISIONS FOR OTHER MANDATORY TESTS.
2. DELETED.
3. DELETED
4. AIR-TIGHT SHUT-OFF VALVE NEEDED FOR HEPA DRAIN LINES TO ENSURE NO OFF-GAS DISCHARGE THROUGH LINE. THIS VALVE IS CONNECTED TO FIRE PROTECTION SYSTEM.
5. SEE TYPICAL CONTROL VALVE DWG. 632758.
6. CONNECTION TO DWG 632760 AWFCO IS NOT SHOWN TO IMPROVE CLARITY. THE LOGIC WILL BE DESCRIBED IN THE LOGIC DEFINITION DOCUMENT.
7. CHANGED INSTRUMENT AND VALVE TAG NUMBERS PER MCP-3785 AND EQUIPMENT TAG NUMBERS PER DCN-IWTU-115.
8. SEE TYPICAL PRESSURE RELIEF AND RUPTURE DISK DWG. 632758.

SAFETY SIGNIFICANT ITEMS:

ALL EQUIPMENT FOR PRIMARY CONFINEMENT OF MERCURY VAPORS. THIS EXCLUDES:
A. PIPING DOWNSTREAM OF HV-SRH-140-007
B. I&C LINES.
C. HV-SRH-140-007 TO REMAIN AIR TIGHT AND SHUT DURING NORMAL OPERATIONS.
D. PROCESS HEPA PREFILTER. PROCESS HEPA FILTER STAGE 1 AND PROCESS HEPA FILTER STAGE 2.
E. PIPING DOWNSTREAM OF PSV-SRH-140-008.
F. TEMPERATURE ELEMENTS INSIDE THERMOWELL.

## REFERENCE DRAWINGS

| DRAWING NO. | DRAWING TITLE |
|---|---|
| | |

# IDAHO CLEANUP PROJECT
# INTEGRATED WASTE TREATMENT UNIT

## PIPING & INSTRUMENT DIAGRAM PROCESS HEPA FILTERS

Washington Group International
7800 E. Union Ave. - Denver, CO 80237 - (303) 843-2000

| REVISION APPROVAL RECORD | | | | | REV 0 |
|---|---|---|---|---|---|
| DISCIPLINE | BY | DATE | DISCIPLINE | BY | DATE |
| ARCH. | — | — | MECHANICAL | | 10/12/06 |
| CIVIL | — | — | NUCLEAR | | |
| ELECTRICAL | | 10/12/06 | PIPING | | 10/12/06 |
| ENVIRON. | — | — | PROCESS | | 10/12/06 |
| GEN. ARRANG. | | 10/12/06 | QA / QC | | 10-12-06 |
| HVAC | | 10/12/06 | STRUCTURAL | | 10-12-06 |
| I & C | | 10/12/06 | REMOTE HDL. | — | — |
| | | | SYS. ENGR. | | 10-12-06 |

| DRAWING STATUS | | | | |
|---|---|---|---|---|
| ISSUED | REV | DATE | LDE | PEM |
| PRELIMINARY | 1 | 09/22/06 | RLH | NDA |
| APPROVED FOR CONSTRUCTION | 0 | 10/12/06 | R-LK | |

NOT APPROVED FOR CONSTRUCTION UNLESS SIGNED & DATED. DESTROY ALL PRINTS BEARING EARLIER DATE &/OR REV.NO.

PROFESSIONAL ENGINEER REGISTERED 17201 STATE OF IDAHO THOMAS WILLIAM NELSON 10/13/06

| SIZE | FOR DRAWING INDEX SEE DRAWING NO. |
|---|---|
| E | 200-1696-24-923-632756 |

Thor Treatment Technologies

| | | | |
|---|---|---|---|
| SCALE: NONE | PWE DATE 10/06/06 | PROJECT NO. 28276 | |
| DRAWN: ORW | DATE 09/01/05 | WBS: P.1.04.03.05 | |
| DESIGNED: | DATE 10/12/06 | SYSTEM: | QUALITY LEVEL: 2 |
| CHECKED: | DATE 10/12/06 | DRAWING NUMBER 632797 | REV 0 |
| VERIFIED: | DATE 10/12/06 | | |
| APPROVED: | DATE | | |
| CAD FILE NAME: 632797.pid | | INDEX CODE NUMBER: AREA 200, TYPE 1696, CL 24, SERIES 923 | SHEET P-48 |

$WGI$DESIGN_FILE_PATH_AND_NAME_EXTENSION$
$WGI$PLOT_DATE_AND_TIME$