

Pristine

Remote Monitoring and Control System for Vessel Effluent Pump-Out Stations

A vital component of any vessel pump-out facility.

As submitted for
2001 NSW
Premier's Public
Sector Awards



PRISTINE provides a cost-effective means to record effluent disposal volumes and usage patterns of both commercial and recreational vessels. Through the installation of the PRISTINE remote monitoring and pump control system, effluent disposal volumes for vessels are recorded automatically each time they use the pumpout facility – recording the date, time, and volume. This information can be easily accessed via a modem dial-up or through the Internet. The retrieved data can be easily imported into whatever spreadsheet or database system is most convenient.

A small additional investment will guarantee valuable pump out usage data can be acquired and analysed.

Our satisfied customers include:

- Waterways Authority of NSW
- Hornsby City Council
- Sydney Harbour Foreshore Authority

All these organisations now have accurate information on WHO uses the Pump-Out facility, WHEN it is used and what VOLUMES are pumped out.

PRISTINE is a compact, robust, extremely reliable computer system that will:

- Adapt to any existing or planned pump-out system
- Provide vital information on who IS and who IS NOT using the pump-out facility
- Provide management reports on facility usage
- Assist in enforcing compliance
- Significantly contribute to cleaner waterways
- Automatically record effluent disposal volumes by registered vessel
- Automatically transfer daily usage details to any nominated computer
- Monitor system for damage, broken pipes and other measurable faults

**Recreational
& Commercial**



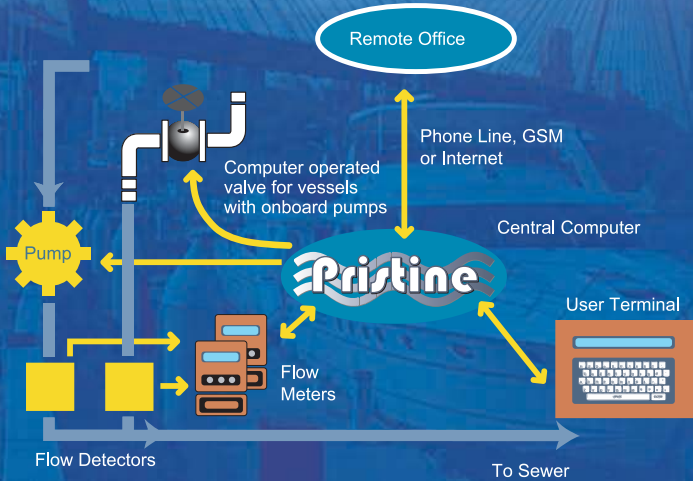
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How it works

PRISTINE has been designed from the ground up for flexibility. Major features include :

- Recording all user pumping volumes, dates/times, valve activity, rates of flow, logins/outs and timeouts
- Monitoring and control of multiple pumpout points at a single location
- Can be configured to enable :-
 - Operation of multiple pump out berths from a single PRISTINE system
 - Sharing a single User Terminal across many pump out points
 - Interfacing with many valves, pumps and meters
- Capacity to enforce user login before pumps or valves can operate
- Remote management by dial-up, internet, or SMS over the GSM network
- Information retrieval by dial-up or internet
- Straightforward data files that can be easily imported into various spreadsheet and/or ODBC database systems



"PRISTINE is leading edge technology that is playing a vital role in the NSW government's commitment to the cleaning of the State's waterways. The system is unique because it allows remote monitoring of boats using the pumpout and the amount of effluent discharged."

Leslie Brix-Nielson, NSW Waterways Authority



Boat No	Boat Name	User Code	Start Time	End Time	Volume (L)
1234567	ABCDEF	1234	10:00:00	10:05:00	150
1234567	ABCDEF	1234	10:05:00	10:10:00	150
1234567	ABCDEF	1234	10:10:00	10:15:00	150
1234567	ABCDEF	1234	10:15:00	10:20:00	150
1234567	ABCDEF	1234	10:20:00	10:25:00	150
1234567	ABCDEF	1234	10:25:00	10:30:00	150
1234567	ABCDEF	1234	10:30:00	10:35:00	150
1234567	ABCDEF	1234	10:35:00	10:40:00	150
1234567	ABCDEF	1234	10:40:00	10:45:00	150
1234567	ABCDEF	1234	10:45:00	10:50:00	150
1234567	ABCDEF	1234	10:50:00	10:55:00	150
1234567	ABCDEF	1234	10:55:00	11:00:00	150
1234567	ABCDEF	1234	11:00:00	11:05:00	150
1234567	ABCDEF	1234	11:05:00	11:10:00	150
1234567	ABCDEF	1234	11:10:00	11:15:00	150
1234567	ABCDEF	1234	11:15:00	11:20:00	150
1234567	ABCDEF	1234	11:20:00	11:25:00	150
1234567	ABCDEF	1234	11:25:00	11:30:00	150
1234567	ABCDEF	1234	11:30:00	11:35:00	150
1234567	ABCDEF	1234	11:35:00	11:40:00	150
1234567	ABCDEF	1234	11:40:00	11:45:00	150
1234567	ABCDEF	1234	11:45:00	11:50:00	150
1234567	ABCDEF	1234	11:50:00	11:55:00	150
1234567	ABCDEF	1234	11:55:00	12:00:00	150

Waterways
BLACKWATTLE BAY VESSEL PUMP OUT OPERATING INSTRUCTIONS
 DISCHARGE POINT LAYOUT

SECTION 2 SECTION 1

8 7 6 1

5 4 3 2

Operation

- Connect Power to Remote Valve at Discharge Point
- Open Handlock Valve
- Open Stainless Steel Cabinet main door
- Display red read "Please enter a pump out number" Eg "1234"
- Refer to diagram and enter "1234" then the discharge point # connected to the vessel eg "1" - enter "1" for discharge point location 1. Note the "1" will not appear on the screen.
- Display responds with "Please Enter User Code"
- Enter the digit "1234" then press "ENTER"
- Display responds with identification of vessel and "Please Enter ID#"



More information can be found at www.planetengineering.com.au/pristine/Index.html

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