



SALEYARD AND TRUCKWASH EFFLUENT

SECONDARY TREATMENT SYSTEM

For Earth Pty Ltd are the Australian Saleyard Industry leaders in secondary treatment of saleyard and truck wash effluent.

Our treatment system is very simple to operate, maintain and proven in many States of Australia.

Typically, our treatment tank system is installed after primary treatment (the removal of solids via screening system). Screened effluent water from the yards or truck wash passes through 3 poly tanks in series which contain our aeration and bacteria dosing system that treat the water and remove nutrients. This is known as Biological Nutrient Removal and is the same principals used at your local sewage treatment plant.

We can also install our aeration and bacteria dosing system into existing or proposed ponds.

The system is very economical in capital costs and operational costs. Various avenues of funding are available. Most sites are operating at a profit.

Sites us Avdata to manage user access and billing. <https://avdata.com.au/truckwashes>

We have numerous designs/drawings that can assist your engineering departments.

If your regional area is in need of a truck wash or saleyard effluent treatment system than please read the following case studies. Call or email for further information.



www.forearth.com.au

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PROJECT FILE



Wastewater Solutions

| Client | Council |
|-----------------------------|---|
| Location | NSW. |
| Effluent Management Process | Truck Wash with solids screening ramp, Bio-Reactors tanks and irrigation storage dam |
| Est. flow | Maximum flow of 35,000L/week |
| Works installed | Install For Earth Poly tank Bio-Reactor system with aeration and automated bacteria dosing. |
| Install Date | December 2019 |
| Description | Truckwash ramp under cover. Stormwater runoff collected for use. Solar Power installed on roof. Solids collection screening ramp used. Secondary wastewater flows through For Earth Poly Tank treatment system. Treated water stored for irrigation in holding dam. |



PROJECT FILE



Wastewater Solutions

| Client | Council |
|-----------------------------|--|
| Location | NSW. |
| Effluent Management Process | Truck Wash with solids screening ramp, Bio-Reactors tanks and evaporation dam |
| Est. flow | Maximum flow of 35,000L/week |
| Works installed | Install For Earth Poly tank Bio-Reactor system with aeration and automated bacteria dosing. |
| Install Date | November 2018 |
| Description | Truckwash ramp. Solids collection screening ramp used. Secondary wastewater flows through For Earth Poly Tank treatment system. Treated water stored in holding dam. |



PROJECT FILE



Wastewater Solutions

| Client | Council |
|-----------------------------|---|
| Location | NSW. |
| Effluent Management Process | Truck Wash with solids screening ramp, Bio-Reactors tanks and discharge to sewer. |
| Est. flow | Maximum flow of 20,000L/week |
| Works installed | Install For Earth Poly tank Bio-Reactor system with aeration and automated bacteria dosing. |
| Install Date | July 2021 |
| Description | Truck wash single ramp with raised platform. Second ramp for drivers to empty effluent tank that collects trailer floor waste. Solids collection screening ramp used. Secondary wastewater flows through For Earth Poly Tank treatment system. Treated water discharged to sewer. |



Google Earth
Imagery Date: 6/15/2023 30°58'45.67"S 151°34'21.76"E elev 1099 m eye alt 1.24 km

PROJECT FILE



Wastewater Solutions

| Client | Council |
|-----------------------------|--|
| Location | NSW. |
| Effluent Management Process | Truck Wash with Tank Bio-Reactors and wet weather storage pond for irrigation. |
| Est. flow | Maximum flow of 48,000L/week |
| Water Quality Testing | 26/02/2014 BOD Influent 1400mg/L, Treated Effluent BOD 140mg/L, BOD reduction 88%. 22/5/14 BOD Influent 1410 mg/L, Treated Effluent BOD 57mg/L, BOD reduction 95% |
| Works installed | Install For Earth Bio-Reactor system with automated bacteria dosing. |
| Install Date | 11/12/13 |
| Description | Effluent is collected from the truck wash in an effluent pit and large solids are screened. Screened effluent is then transferred to a holding tank which is then transferred to the Bio- Reactor. The Bio-Reactor consists of 3 poly tanks in series. Each tank has aeration and biological dosing. The system will provide ongoing biological sludge reduction and odour control. Water quality improves as it passes through each bioreactor tank and treated effluent gravity flows to storage pond to be held for irrigation. |



For further details email: shanem@forearth.com.au

PROJECT FILE

Livestock Truck Wash



Wastewater Solutions

| Client | Council |
|-----------------------------|--|
| Location | NSW |
| Effluent Management Process | Truck Wash ramp, solids trap, For Earth Bio-Reactor, discharge to sewer. |
| Est. flow | Daily flow volume is between 2,000L to 31,000L with bulk on Friday and Saturdays. |
| Water Quality Testing | Inflow BOD varies from 1,300 to 3,000mg/L. Discharge quality under NOW trade waste licence BOD < 300mg/L.. |
| Works installed | Install For Earth Bio-Reactor system (3 x 20KL Poly Industrial Tanks) with automated bacteria dosing. |
| Install Date | 31/3/2015 |
| Description | Truck wash ramp gravity flows to solids trap and sump. Wastewater is transferred from sump to Bioreactor 1 which gravity flows through the 3 tanks that are all aerated and dosed with For Earth Bio (nitrogen cycle bacteria). Treated water flows to STP under trade waste licence parameters. |



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PROJECT FILE

Livestock Truck Wash



Wastewater Solutions

| Client | Council |
|-----------------------------|---|
| Location | QLD |
| Effluent Management Process | UPGRADE -Truck Wash ramp, solids trap, ponds, For Earth Bio-Reactors tanks, Chlorination and reuse. |
| Est. flow | Daily flow volume is estimated at 150,000L to 200,000L |
| Works installed | Install For Earth Bio-Reactor system (8 x Poly Industrial Tanks) with automated bacteria dosing. Final tank not aerated, used for settlement of solids. Pre-treatment before re-use. |
| Install Date | 10/8/2015 |
| Description | For Earth was selected by Clients consultant to supply the wastewater treatment process after review of other similar For Earth systems at livestock exchanges. |
| | \$3 million upgrade funded by QLD State and local Government and Santos GLNG. |



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BALLARAT SALEYARDS EFFLUENT TREATMENT SYSTEM

Ballarat Courier Farmers Weekly, 8 Feb 2012.

AN INNOVATIVE new waste management system to be switched on this week is expected to have dramatic savings for the Ballarat saleyards. Current trade waste fees remain one of the saleyards' single biggest costs, with the organisation charged for the quality and volume of its liquid run-off from sheep and cattle yards. But the new technology, which will operate via a tank refining system loaded with living bacteria and aeration, will make a large improvement to the quality of waste sent to the sewer. "If it works as we project it's going to work and the trials have shown, we'll save at least 50 per cent on our trade waste per year," saleyards manager Jonathan Crilly said. "(Waste) will still be discharged to the sewer, but we will only be charged on volume rather than quality. Fundamentally it comes out as pretty good water."

Mr Crilly said the new system could easily be transported when it came time to establish a new saleyards site away from Gillies Street, which he says is a matter of when, not if.

"It will be paid for by the time we move and we will pick it up and take it with us. "We will learn a lot about what can be done for the new site," he said.

Mr Crilly said the project had cost in excess of \$100,000 and had taken about two weeks to construct once extensive planning had been completed.

New South Wales-based company For Earth developed the Bioreactor System, which they say is becoming popular around Australia. For Earth manager Shane McKibbin said the concept was basically a copy of a council sewerage plant. "We do a lot of it in in-ground ponds, but when you can't have effluent ponds, you do it in tanks. It's the same process," Mr McKibbin said. "You have separate tanks and as it (wastewater) moves along the tanks the water quality improves and Biological Nutrient Removal occurs and less fees are paid on discharge"



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