

CLAIMS

What is claimed:

1. A process to remove materials of potential concern from subsea pipelines comprising: 1) removal of the materials metals of potential concern from the internal pipeline surface by filling the pipeline with dilute mineral acids, 2) evacuation of the separated metals of potential concern from the pipeline, 3) offshore treatment and disposal of generated waste materials, and 4) verification that the metals of potential concern are reduced to below a safe target limit.
2. The process of claim 1, wherein the mineral acid is selected from the group consisting of HCl, H₂SO₄, HNO₃, HF, (NH₄)HF₂, organic acids such as acetic acid, oxalic acids, and mixtures thereof.
3. The process of claim 2, wherein a pig is used after the mineral acid addition to remove remaining solids from the pipeline surface.
4. The process of claim 1, wherein the evacuation of the separated metals of potential concern is achieved by use of a gel plug.
5. The process of claim 1, wherein the offshore treatment consists of neutralization of the acids.
4. The process of claim 5, wherein the verification is achieved using an atomic adsorption spectrometer.