



POSIDON

POLLUTED SITE DECONTAMINATION PCP



HPC ITALIA




Project Phase Abstract





POSIDON has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N.776838

Public Description of the Project

If my tender is successful, I authorize to publish the following summary for marketing purposes. Accordingly, this summary is mandatory, but will not be assessed as part of the tender. By submitting this tender, I hereby grant full permission for the publication aforementioned.

| Bidder Details | Type/ size of legal entity | Place of performance of contract activities | Logo |
|--|-------------------------------------|---|---|
| <p>Main contractor</p> <p>HPC ITALIA S.r.l.</p> <p>Via Francesco Ferrucci 17/a – 20145 Milan Name contact person: Raffaele Pellegatta Phone nr contact person +39 0245488990 E-mail address contact person: raffaele.pellegatta@hpc-italia.it</p> | SME | <p>% of contract value allocated to main contractor: [25] % (Phase I)</p> <p>% of activities for the contract performed by the main contractor in EU Member States or countries associated with Horizon 2020: [100] %</p> |  |
| <p>Other consortium member(s) (if applicable)</p> <p>Fondazione Politecnico di Milano (with support of Politecnico di Milano as auxiliary economic operator in availment according to art. 89 of Legislative Decree n. 50 of 2016)</p> <p>Piazza Leonardo da Vinci, 32 20133 Milan (Italy) Name contact person: Antonio Chiaia Phone nr contact person: +390223999173 E-mail address contact person: antonio.chiaia@fondazione.polimi.it</p> | University Foundation | <p>% of contract value allocated to contractor [Fondazione Politecnico di Milano]: [40] % (Phase I)</p> <p>% of activities for the contract performed by contractor [x] in EU Member States or countries associated with Horizon 2020: [100] %</p> |  |
| <p>Ambiente S.p.A.</p> <p>Via Frassina, 21 – 54033 – Carrara (MS) – Italy Name contact person: Patrizia Vianello Phone nr contact person: +390585855624 E-mail address contact person: international@ambientesc.it</p> | SME | <p>% of contract value allocated to contractor [Ambiente S.p.A.]: [20] % (Phase I)</p> <p>% of activities for the contract performed by contractor [x] in EU Member States or countries</p> |  |

| | | | |
|---|-----|--|--|
| | | associated with Horizon 2020: [100] % | |
| HPC International SAS Hôtel de Recherche, Centre Perharidy, 29680 Roscoff, France Name contact person: Dr. Frank Karg Phone nr contact person: +33607346 916 E-mail address contact person: frank.karg@hpc-international.com | SME | % of contract value allocated to contractor [HPC International Sas]: [15] % (Phase I) % of activities for the contract performed by contractor [x] in EU Member States or countries associated with Horizon 2020: [100] % |  |
| GEYSER HPC, S.A.U. Avd. Iparraguirre, 80 1º Dcha 48940 Leioa (Bizkaia) Name contact person: Celestino Piñeiro Temprano Phone nr contact person: +34686968923 E-mail address contact person: cpineiro@hpc.ag | SME | % of contract value allocated to contractor [Geyser HPC S.a.u.]: [0] % (Phase I) % of activities for the contract performed by contractor [x] in EU Member States or countries associated with Horizon 2020: [100] % |  |

Project abstract (4000 characters maximum)

The proposed solution is able to induce/enhance and put into combined action different physical, chemical and biological mechanisms for the clean-up of contaminated sites. The technology offers an in situ flexible platform for addressing various organic and inorganic pollutants and co-contamination, either in the unsaturated or saturated soil/back-fill materials. Moreover, differently from other approaches, the proposed solution can be effectively applied to both fine and coarse grain materials.

According to the design and operative conditions, in fact, it is possible to trigger different phenomena and removal mechanisms, and establish the optimal conditions for the treatment of contaminants of concern in the polluted sites of the project, regardless the initial conditions. Proper setting and control of the operative conditions, to assess before the full-scale application, have nevertheless to be performed in order to optimize the decontamination outcomes.

The modularity of the proposed technology allows operation on contaminated sources of different extensions and depths.

As any totally in situ approach, no significant excavation/disposal of soil is required. Furthermore, the estimated limited requirements of materials, equipment and energy, in comparison to other established technologies, highlight the proposed innovative solution might offer a way for sustainable and cost-effective dealing with soil/groundwater/back-filling heterogeneous contamination.