

CHAPTER 3 – THE QUESTIONNAIRE

A comprehensive questionnaire was developed and distributed to seek industry input on various topics related to HBSN practice. A copy of the 4-page questionnaire is included in Appendix B. The questionnaire consisted of questions in the following 12 categories of interest:

1. Preparer/general information
2. Coatings
3. Sacrificial steel
4. Grout
5. Evaluation of soil corrosivity
6. Field corrosion test programs
7. Laboratory corrosion test programs
8. Thread type/configuration
9. Encapsulated HBSNs
10. Drill bit size/centralizers
11. Knowledge of existence of other HBSN corrosion-related studies.
12. Additional input and/or suggestions for developing corrosion mitigation guidance.

The categories include one or more of the fourteen factors related to consideration of corrosion in design and construction that were discussed in Chapter 2.

The questionnaire was distributed to owner agencies, manufacturers (US and international), design-build contractors, engineers/consultants, trade associations and one university selected on the basis of known faculty interests. Geotechnical engineers from the FHWA Resource Center were responsible for gauging the level of use of soil nails with their State DOT contacts. State DOTs with specific experiences in the use of soil nail technology, particularly as it pertains to HBSNs, were forwarded the questionnaire. Table 1 summarizes the distribution list.

Table 1. Summary of the distribution of the questionnaire.

Category	Contacts
Owners/ Agencies	FHWA and its resource centers All state DOTs (Departments of Transportation)
Manufacturers	AGL Manufacturing, Ltd. Atlas Copco Con-Tech Systems, Ltd. Dywidag Systems International (DSI), USA, Inc. Friedr. Ischebeck, GmbH SAS Stressteel Williams Form Engineering
Design-Build Contractors	DBM Contractors, Inc. Drill Tech Drilling and Shoring, Inc. Foundations Specialties, Inc. (FSI) Hayward Baker Inc. Mays Concrete, Inc. Nicholson Construction Yenter Companies
Engineers/Consultants	Geosystems, L.P. Schnabel Engineering
Trade Associations	ADSC – The International Association of Foundation Drilling Deep Foundations Institute (DFI)
Universities	University of Wyoming (Laramie, WY)